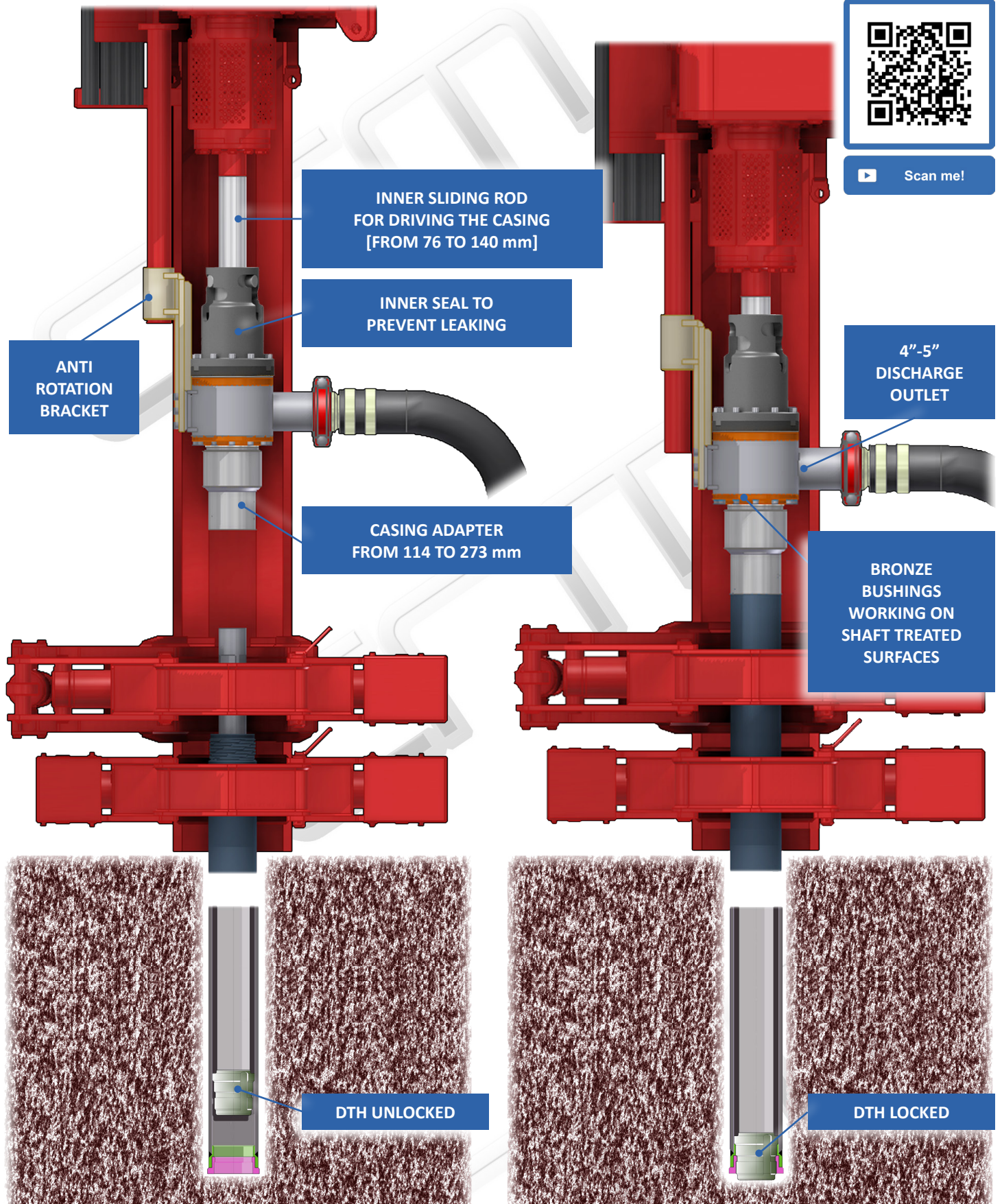




Scan me!



EJECTION HEAD LOCKED:
TORQUE ON BOTH
INNER ROD AND CASING.

EJECTION HEAD UNLOCKED:
TORQUE ON INNER ROD ONLY.
NO TORQUE ON CASING.



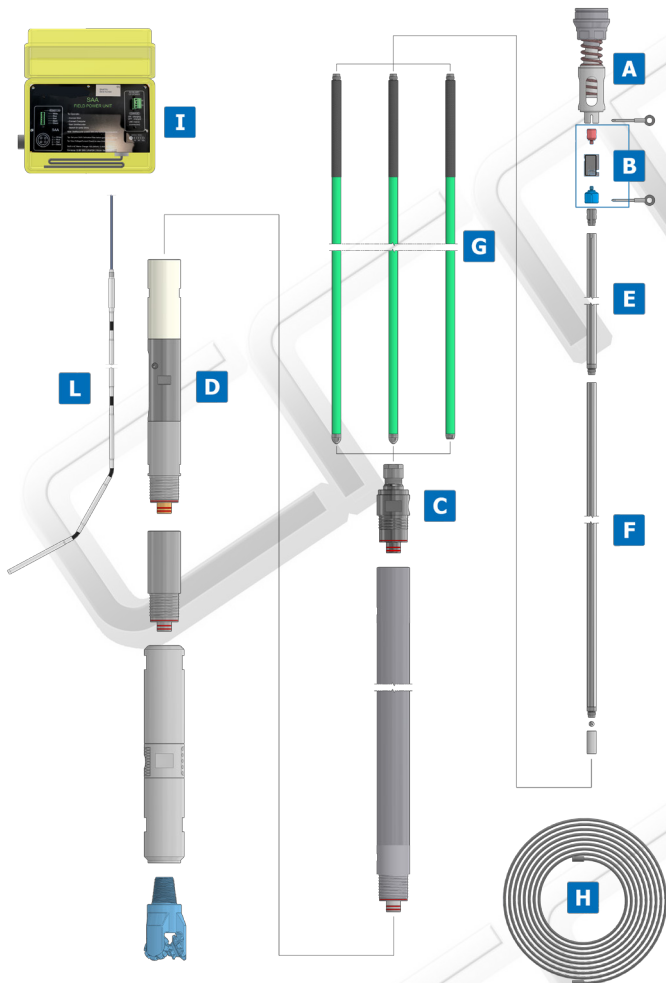
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A) 1x DiaThrust

B) 1 x DiaLoad: wireless load cell and adapters

C) 1 x DiaPrev™: mini preventer unit with 1" gas water inlet and conical seal

D) 1 x DiaDev D™: a deviation tool (OD 114 mm) with a minimum radius of 500mm and a retrievable plug

E) 3 x DiaAll_1M: rigid aluminum 1m pipe (OD 32mm) with tool joint

F) N x DiaAll: rigid aluminum 3m pipe (OD 32mm) with tool joint

G) N x Carbon pipes:

-CarbonFlex: flexible 3m pipe (OD 32mm) with tool joint and closed tip

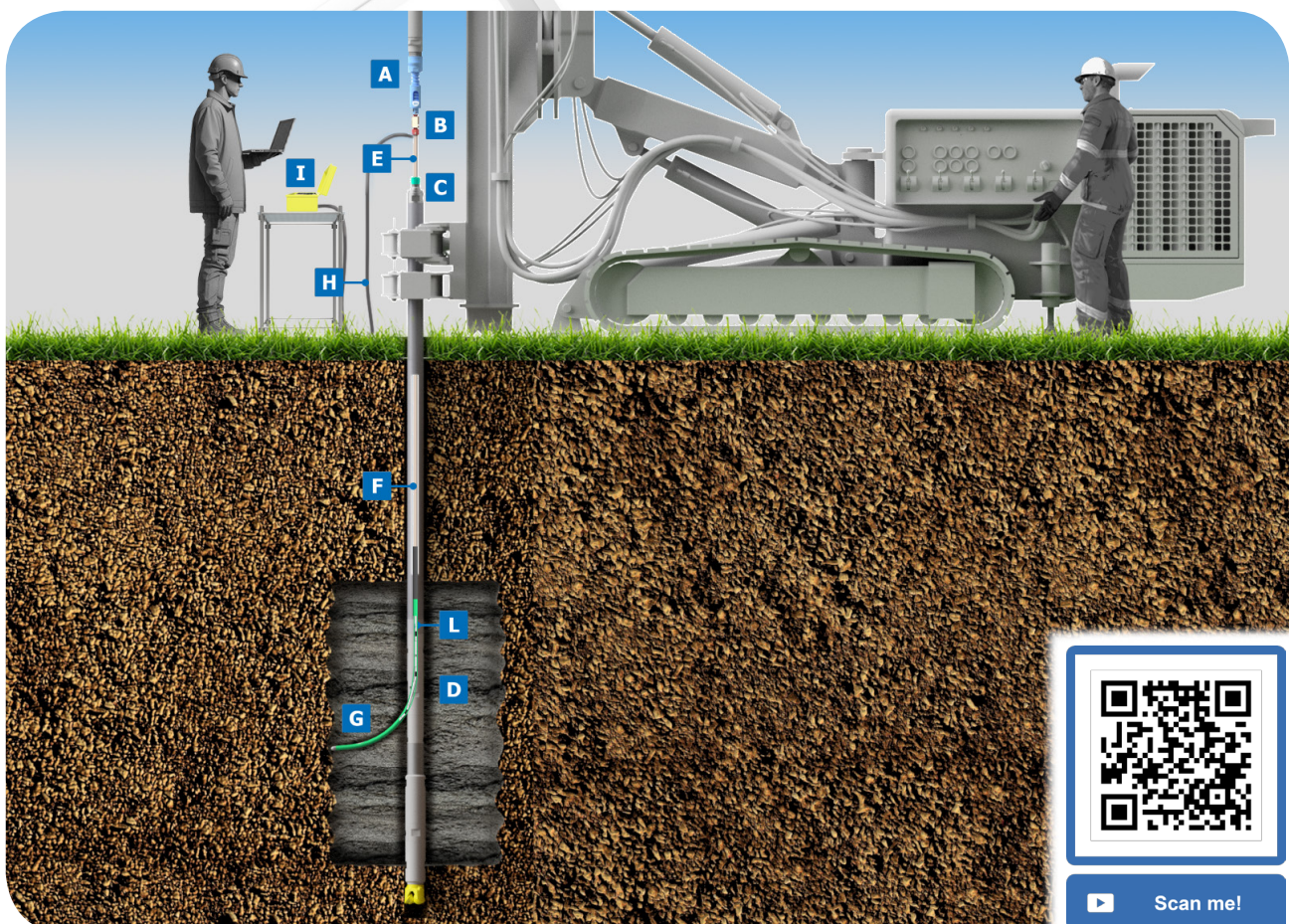
-CarbonShape: flexible 3m pipe (OD 32mm) with tool joint and closed tip

-CarbonCore: flexible 3m pipe (OD 32mm) with open tip for coring

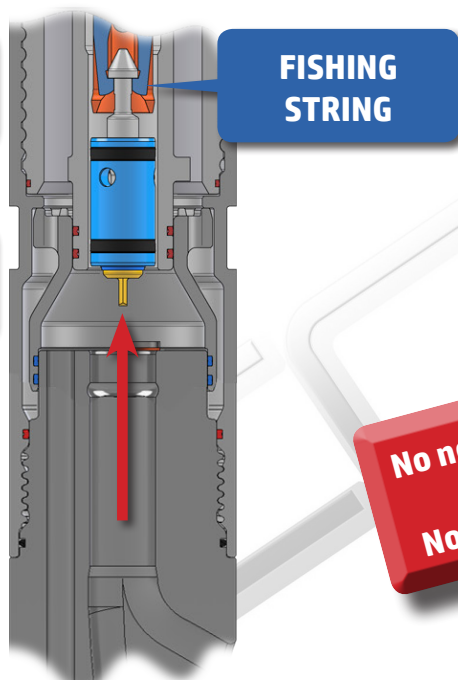
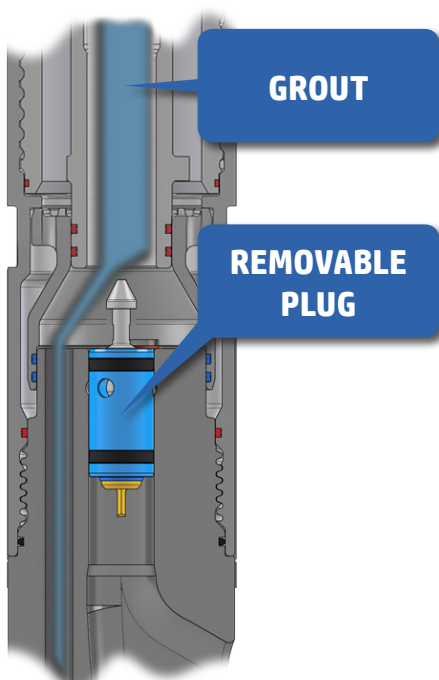
H) 2 x wire labelled extension cords

I) 1 x SAAFPU: fpu-acquisition system-field power unit (SN.0349)

L) 1 x chain SAAV250: shapearray type-model saav-001 L = 2,5 m + 0,5 m silent element in CRM slim configuration



Scan me!

JUST JET AND MEASURE !

**No need to retrieve the string !
No need of tool substitution !**

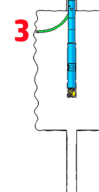
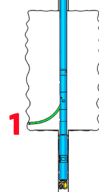
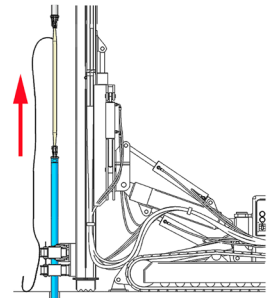
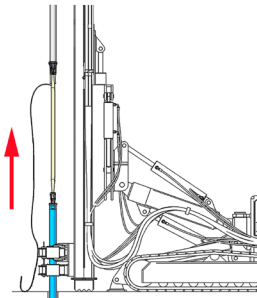
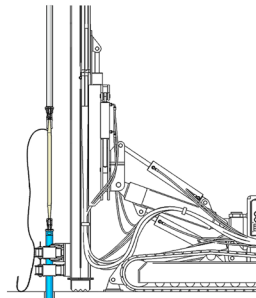
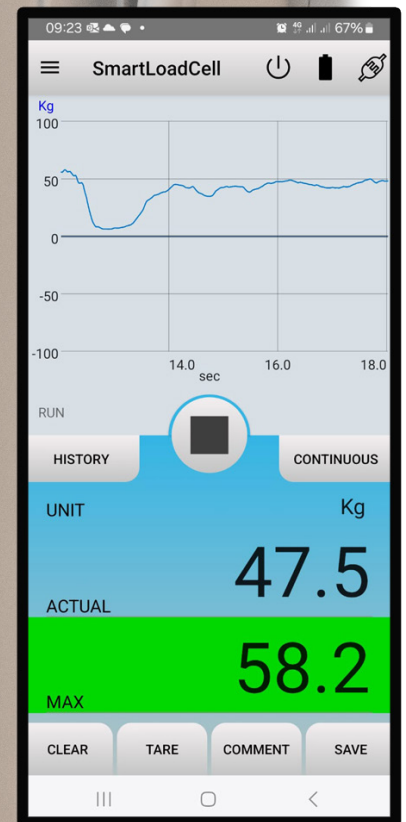
Control the limit between grout and soil
Measure the hardness of the soil at the local depth
Measure the hardness of the grout
Check presence of inclusions

DiaThrust

Load Cell

DiaAll string

DiaPrev



Kit suitable for
Multiple Points Fast Measuring
(when clamps translation is not
available)

CORING



Scan me!

**GROUT
VERTICAL INLET
1"-1/2 BSPP THREAD**

**SAFETY PORT
FOR BEARINGS
SAFEGUARD**

**AIR / WATER
INLET
1"-1/2 BSPP THREAD**

NEW !

**HIGH PRESSURE MODULAR SWIVEL
DOUBLE FLUID
WITH
ROTATING HYDRODYNAMIC SEALS**

Product Overview:

The new high-pressure modular swivel head is engineered for jet grouting applications and features advanced rotating hydrodynamic seals.

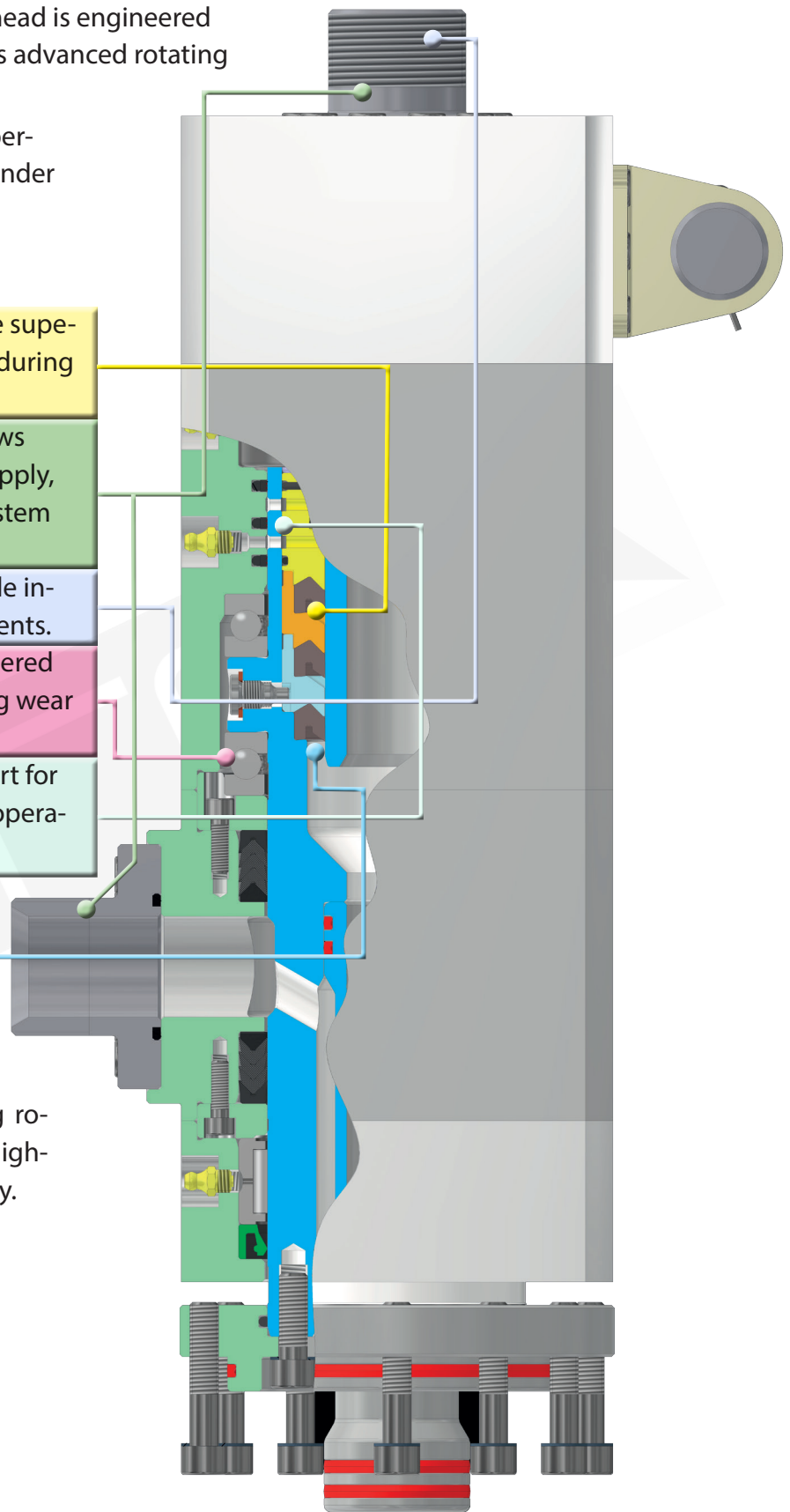
This innovative design ensures reliable performance and easy maintenance, even under demanding site conditions.

Key Features:

- **Rotating Hydrodynamic Seals:** Provide superior sealing performance and durability during high-pressure jet grouting operations.
- **Integrated 1"-1/2 BSPP Gas Inlet:** Allows direct connection for grout, air/water supply, enhancing versatility and simplifying system integration.
- **Grout vertical Inlet:** Available for flexible installation according to project requirements.
- **Bearings Positioning:** Precision-engineered to ensure maximum alignment, reducing wear and extending service life.
- **Safety Port for Bearings:** Dedicated port for safeguarding bearings, contributing to operational safety and longevity.
- **Easy Washing:** Designed for straightforward cleaning after jet grouting steps, minimizing downtime and maintenance effort.

Applications:

Ideal for jet grouting projects requiring robust, modular, and easily maintainable high-pressure heads with integrated air supply.





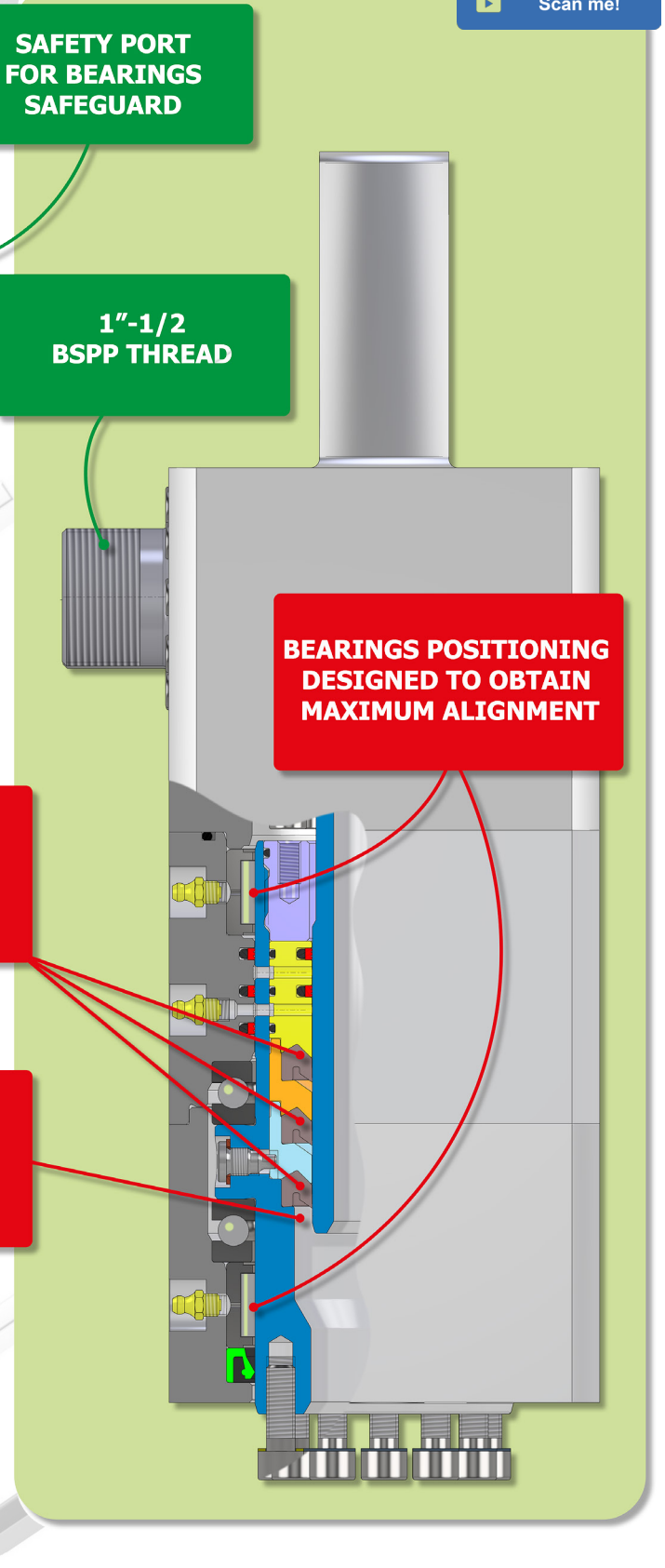
Scan me!



VERTICAL INLET
AVAILABLE !

SAFETY PORT
FOR BEARINGS
SAFEGUARD

1"-1/2
BSPB THREAD



BEARINGS POSITIONING
DESIGNED TO OBTAIN
MAXIMUM ALIGNMENT

ROTATING
HYDRODYNAMIC
SEALS

EASY WASHING
AFTER
JET GROUTING
STEPS !

NEW !



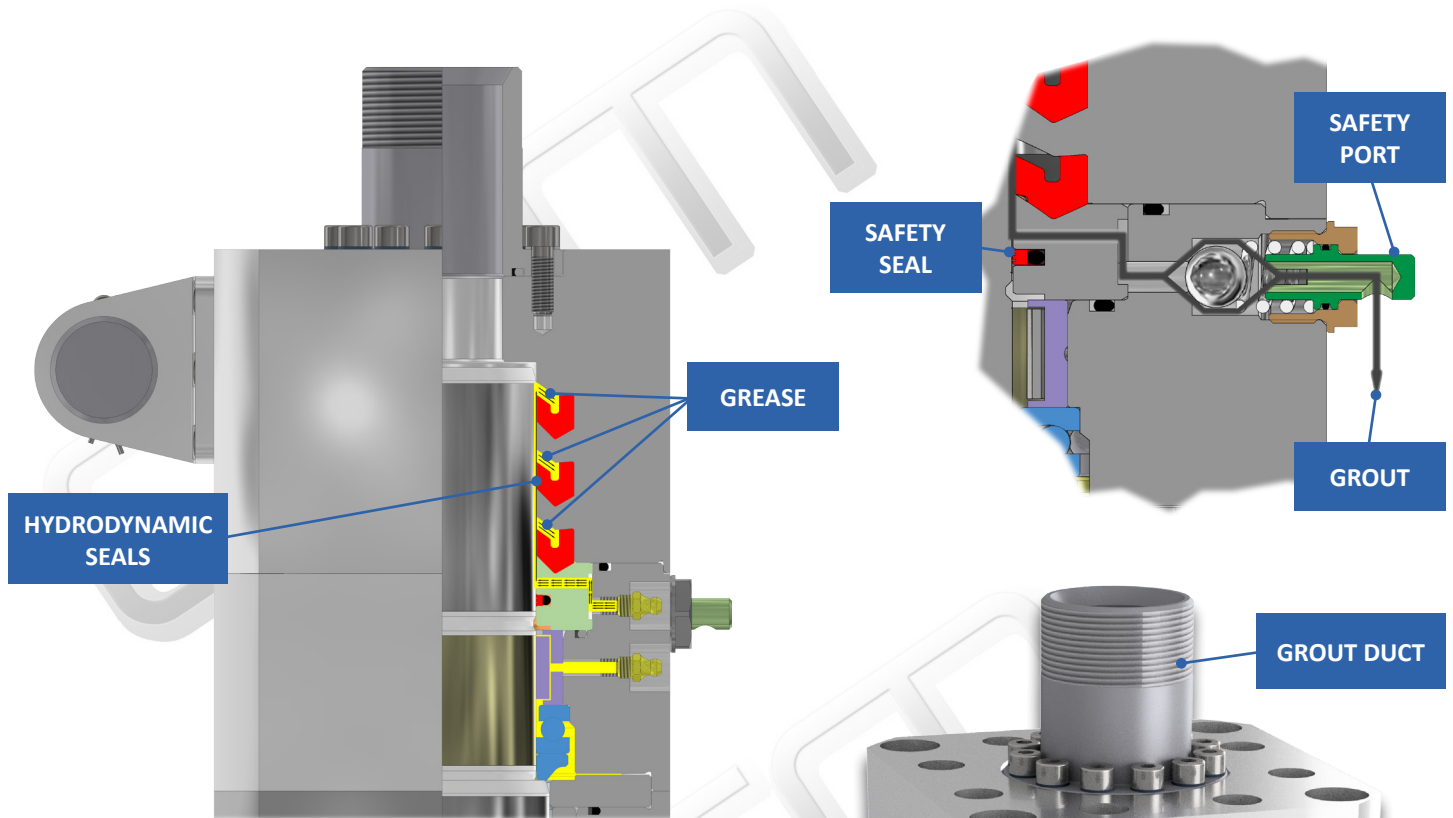
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Our double fluid high pressure swivel has seals with patented (U. S. Patent 9,121,503) hydrodynamic inlets that lubricate the dynamic interface during rotation, reducing friction, heat, and wear.

These seals were developed to reduce downtime in applications up to 420 bar and 150 rpm.

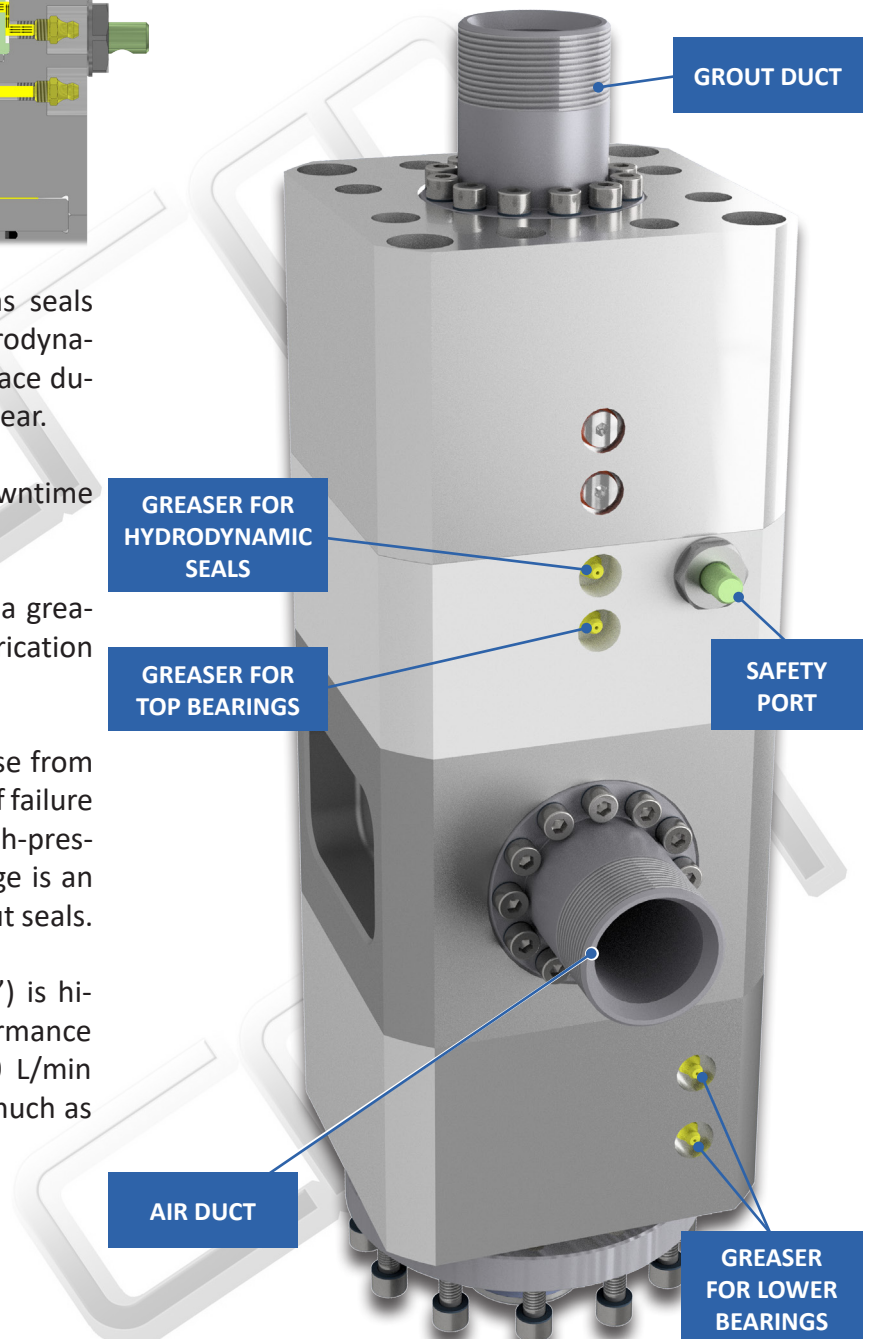
The hydrodynamic seals get lubricated by a greaser placed in the top part of the swivel. Lubrication should occur at least every 8hh.

A safety port with a NRV prevent the grease from coming out during lubrication but, in case of failure of all the seals, the safety port lets the high-pressure grout leak out of the port. The leakage is an alert for immediate substitution of the grout seals.

The great grout passage of this swivel (2") is highly recommended when using high performance triple pumps (up to 600 L/min @ 420bar) to reduce as much as possible head losses.



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**STEP 1:
DRILLING**

GROUT

AIR FLOW

This air dth hammer is designed for double fluid jet grouting treatment. It is equipped with a non-return valve that prevents the grout back pressure to get in. A special seal housed in a longer chuck prevents the grout back pressure to get between the bit and the chuck. During the DTH hammer drilling the air feeds the hammer while the air duct for the air nozzle is closed.

**STEP 2:
JETTING**

AIR FLOW

During the double fluid (GROUT-AIR) jet grouting treatment the high pressure grout closes the air duct for the hammer and opens the air duct for the air nozzle. This simultaneous opening and closing is made possible by an automatic distributor inside the monitor.

**PATENTED
RM99A000395**

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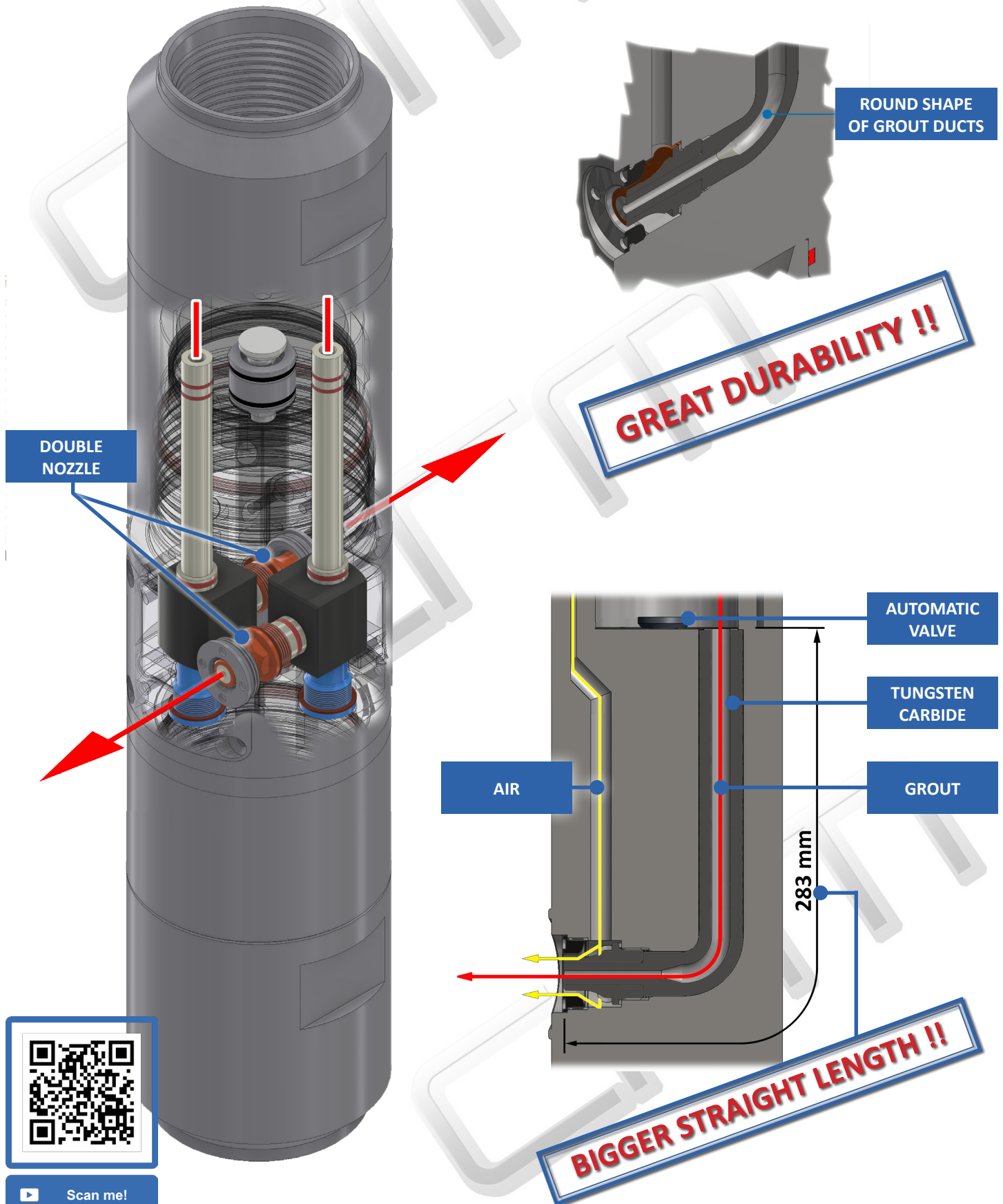
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This is the strajet system version with two nozzles. This is a two ways nozzle holder. In comparison with a standard two ways nozzles holder, it provides a greater cutting force of the grout mix on equal pump's pressure and flow rate. The nozzle has a longer duct for enhancing the cutting power of the grout flow and getting columns of consolidated soil of a greater diameter.





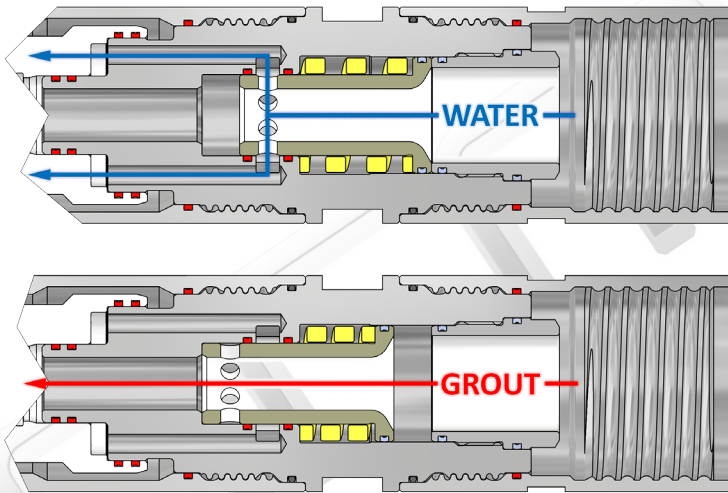
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Integrated Fluid Distributor

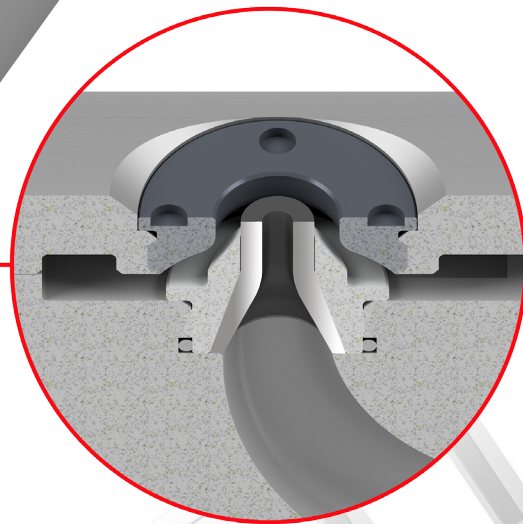
The integrated fluid distributor allows the system to switch to jetting mode before the fluid reaches the nozzle, eliminating the harmful turbulence generated by conventional automatic valves while ensuring the correct water supply to the tool.

Compact & Robust External Body!

Compact external diameter of only 115 mm. No external openings, access panels, or covers, eliminating components that can become difficult to remove after drilling-induced wear



Scan me!



Enhanced Internal Flow Design!

Redesigned internal flow channels optimize the hydraulic performance of the STRAJET series, delivering:

- 25% higher impact pressure
- 25% greater jet energy (impact pressure impact area ratio)

More power! Greater efficiency!
Superior cutting performance!



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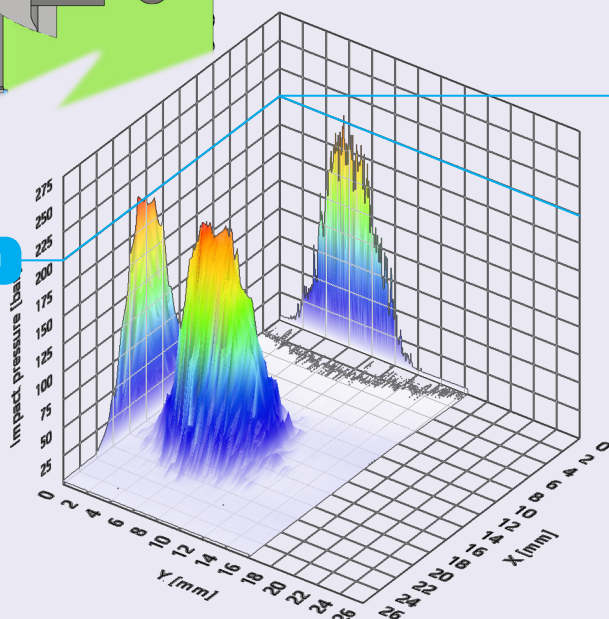
The STRAJET XS is CRM latest high efficiency monitor. It combines the outstanding performance of the STRAJET monitors (it has the same grout duct of the STRAJET XL) with smaller outer dimensions (just 115 mm of diameter). It is designed for double fluid applications where you need to use d. 114 mm or 90 mm rods. Its small dimensions help to minimize drilling problems and ease lifting operations during the jetting treatment.

[Scan me!](#)

**SAME GROUT
DUCT DIAMETER
OF STRAJET XL**

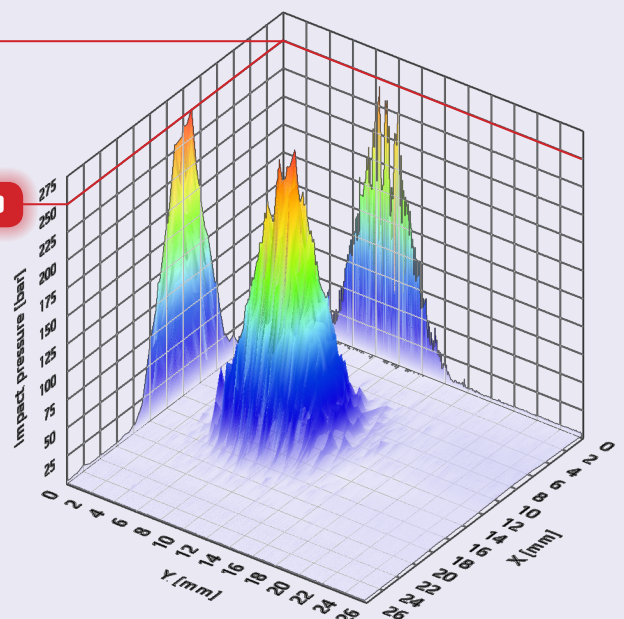
IMPACT PRESSURE DIAGRAM

200



STANDARD NOZZLES HOLDER

250



STRAJET



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The **XL STRAJET** is a nozzle holder suitable for triple pump that can work at around 400 bar and 600 L/min. The difference is in the size of the inner duct (ID 15mm vs ID 11mm). This will save around 50% of the head losses induced by the 11 ID of the STRAJET IV inner duct and provides a greater cutting force of the grout mix on equal pump's pressure and flow rate.

**50% HEAD LOSSES LESS
IN COMPARISON WITH STRAJET IV!**

BIGGER GROUT DUCT DIAMETER !!

NEW!



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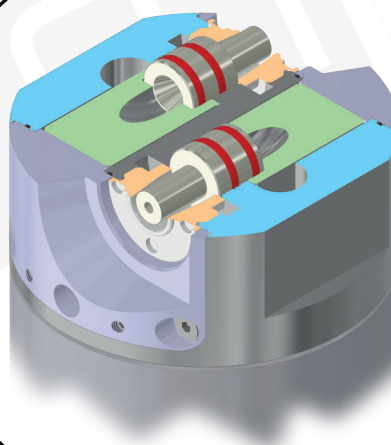


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**SAME GROUT
DUCT DIAMETER
OF STRAJET **XL****



HIGH EFFICIENCY NOZZLES HOLDER
DOUBLE FLUID
DOUBLE NOZZLE

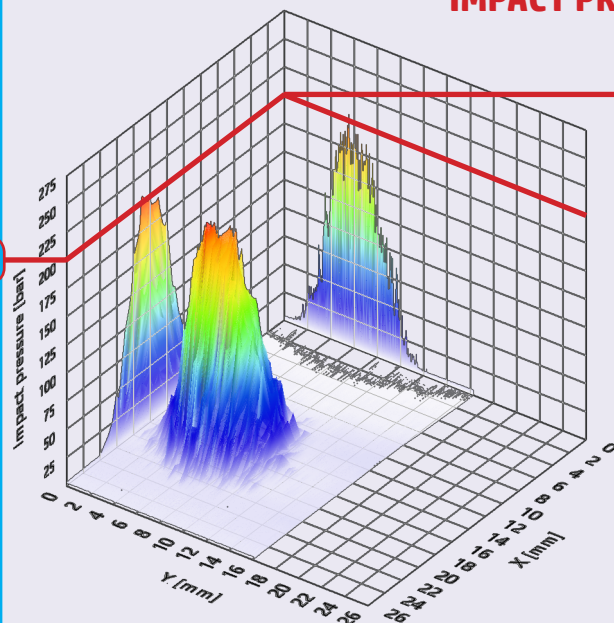
Ø140

Reduced outer diameter
(compared to 168 mm for the
XL double-nozzle version)

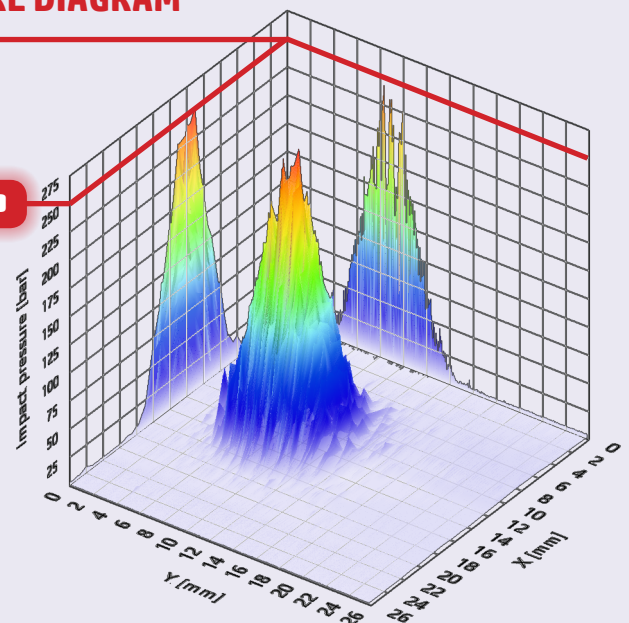
What makes it innovative?

- It retains the cutting performance of its predecessor, the STRAJET XL, but with a reduced outer diameter of 140 mm (compared to 168 mm for the XL double-nozzle version).
- This allows the STRAJET XS to be used with Ø114 mm rods, simplifying drilling operations.
- The smaller diameter enables the use of smaller bits, while still ensuring excellent hole flushing during jet grouting.
- With the same hydraulic power at the nozzle, it delivers 25% higher cutting capacity than traditional monitors.
- The double-nozzle configuration helps create more homogeneous columns, especially beneficial in plastic soils such as clay.
- Compact, efficient, and versatile—the STRAJET XS is designed for those who demand high performance even in challenging operational conditions.

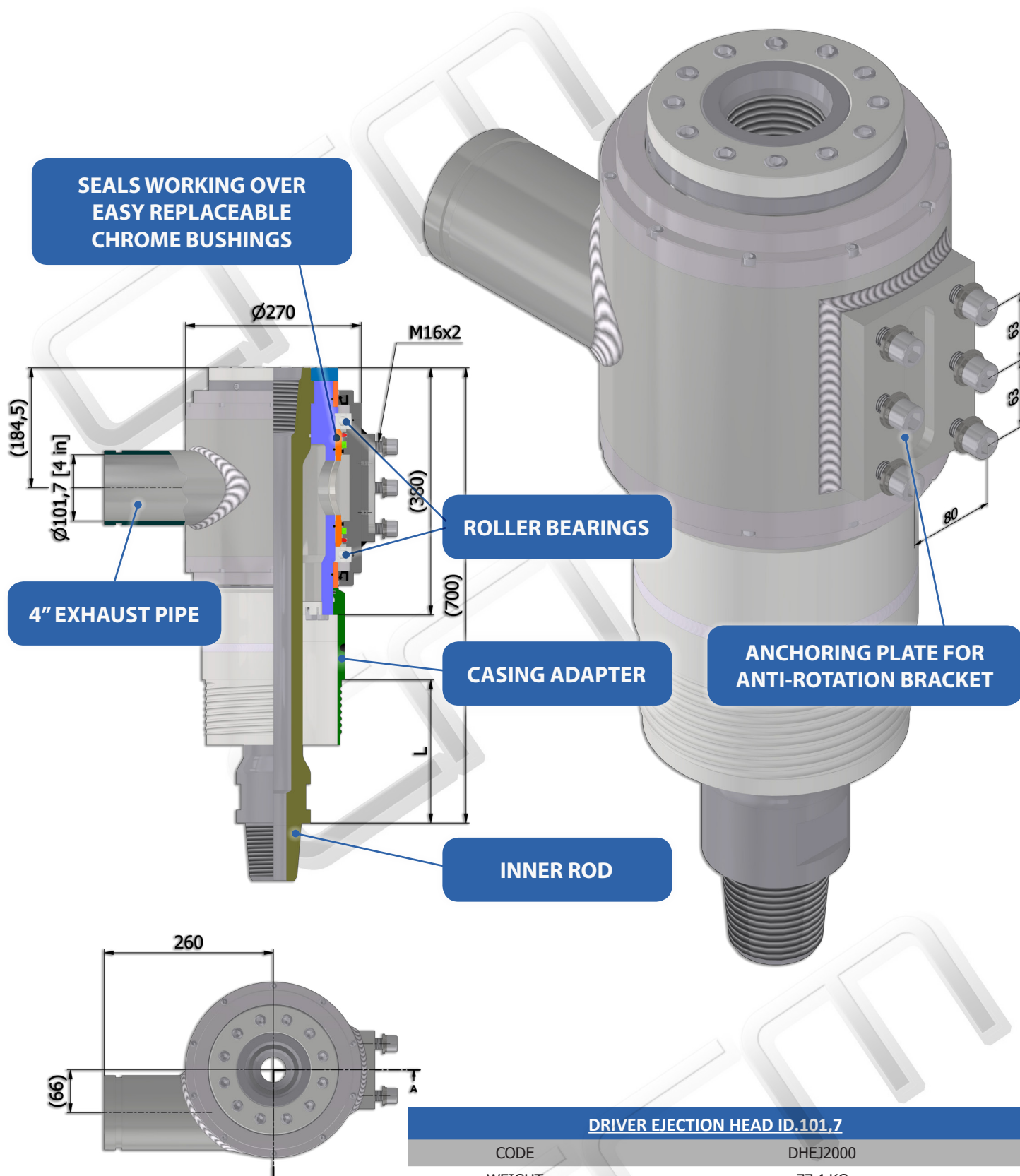
IMPACT PRESSURE DIAGRAM



STANDARD NOZZLES HOLDER



STRAJET

**DRIVER EJECTION HEAD ID.101,7**

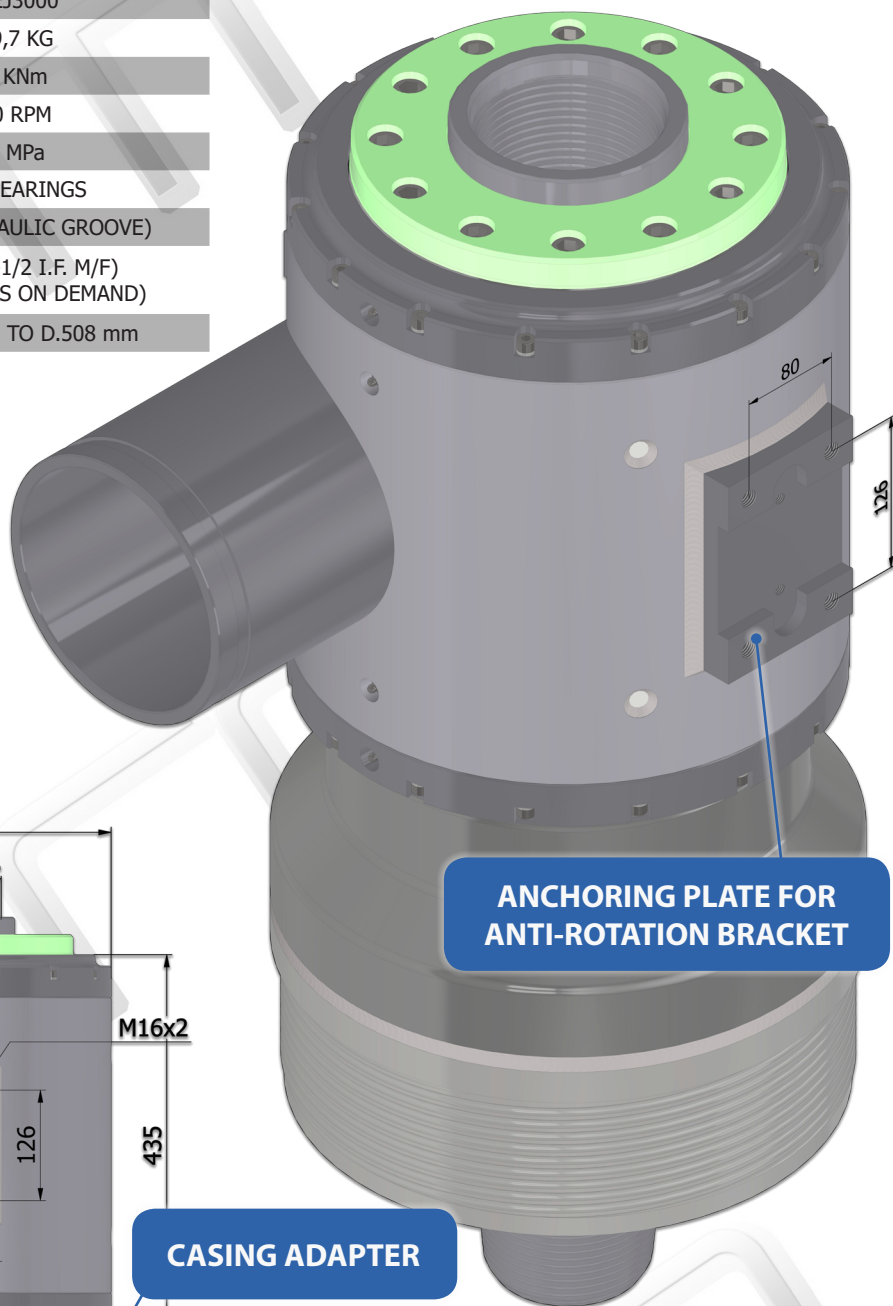
CODE	DHEJ2000
WEIGHT	77,4 KG
MAX TORQUE	34 KNm
MAX ROTATION SPEED	120 RPM
MAX PRESSURE	10 MPa
ROTATION SYSTEM	BALL BEARINGS
STANDARD OUTLET TYPE	4" (VICTAULIC GROOVE)
AVAILABLE RODS	FROM D.76 (2"-3/8 A.R. M/F) TO D.140 (3"-1/2 I.F. M/F)
CASING SIZES	FROM D.114 TO D.298 mm



Scan me!

DRIVER EJECTION HEAD ID.165

CODE	DHEJ3000
WEIGHT	279,7 KG
MAX TORQUE	42 KNm
MAX ROTATION SPEED	180 RPM
MAX PRESSURE	10 MPa
ROTATION SYSTEM	BALL BEARINGS
STANDARD OUTLET TYPE	8" (80D VICTAULIC GROOVE)
AVAILABLE RODS	D.165 (4"-1/2 I.F. M/F) (OTHER SIZES ON DEMAND)
CASING SIZES	FROM D.244 TO D.508 mm



SHAFT WITH CHROME SURFACES FOR SEALS

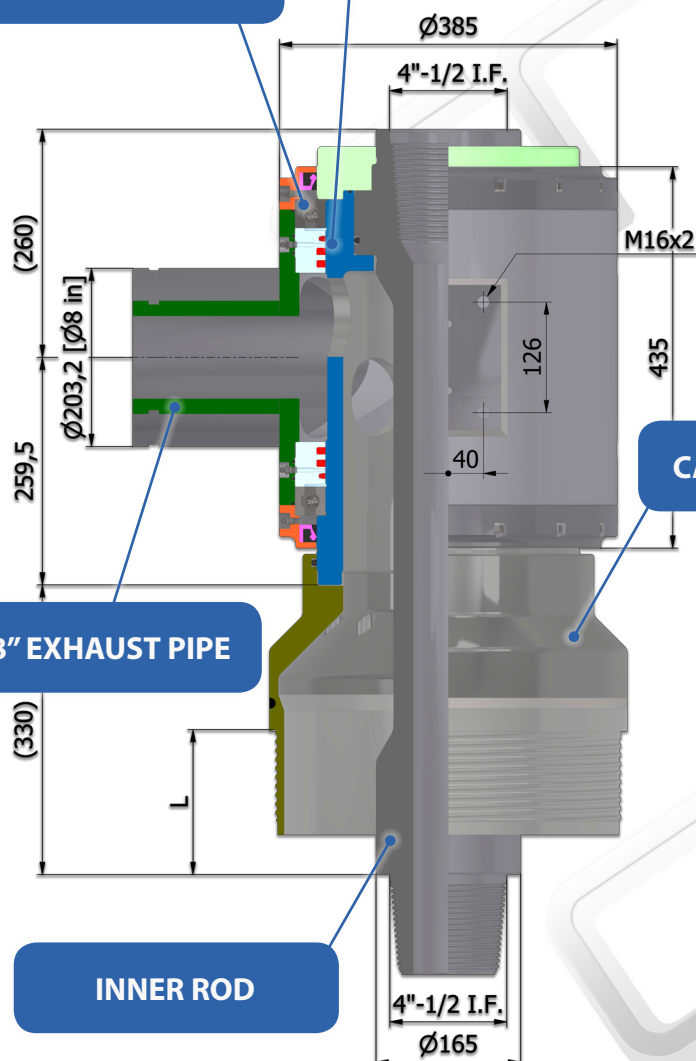
ROLLER BEARINGS

ANCHORING PLATE FOR ANTI-ROTATION BRACKET

CASING ADAPTER

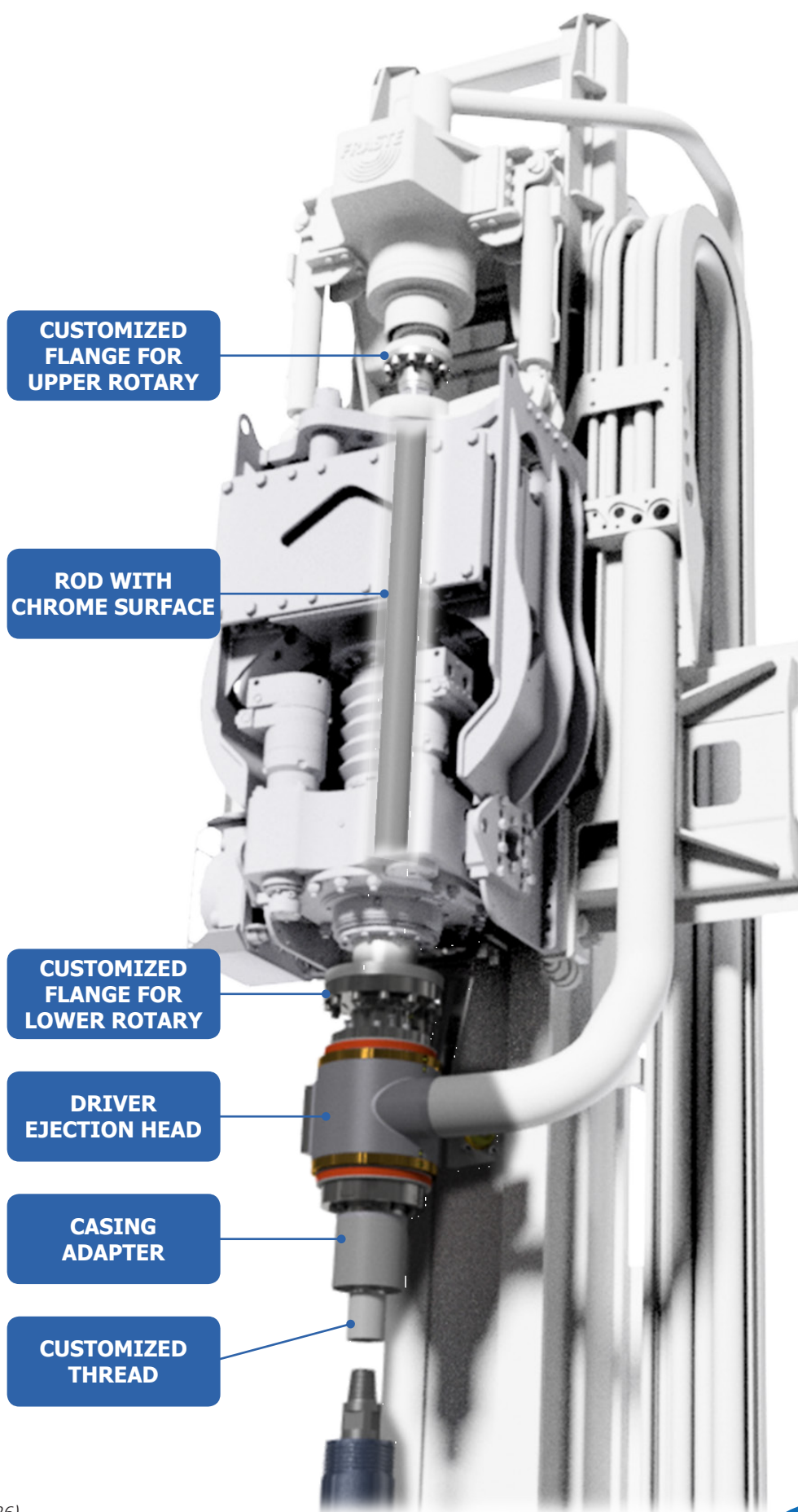
8" EXHAUST PIPE

INNER ROD





DRIVER EJECTION HEADS FOR DOUBLE ROTARY DRILLING



Scan me!



INDEX

INTRODUCTION	2
1) DRIVER EJECTION HEAD ID.90 (ROTATION DRILLING).....	4
2) DRIVER EJECTION HEAD ID.114 (ROTATION DRILLING).....	6
3) DRIVER EJECTION HEAD ID.90 (VIBRATION DRILLING)	8
4) DRIVER EJECTION HEAD ID.114 (VIBRATION DRILLING)	10
5) DRIVER EJECTION HEAD ID. FROM 114 TO 127	12
6) PARTS CODING DIAGRAM	14

INTRODUCTION

These ejection heads are designed for double rotary overburden drilling, for all those ground condition where there is the need of flushing to be conveyed within the drill string, between the drill rod and the casing.

These ejection heads are suitable for rotation or vibro rotaries.

The rotation versions have bronze bushings and rotative seals (fig.1).

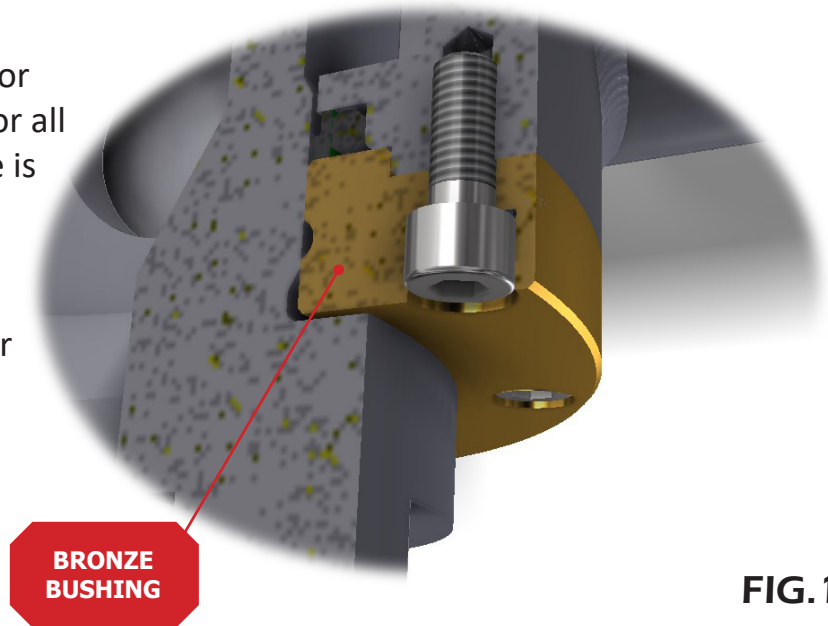


FIG.1

The vibro versions have bronze bushings and floating shaft on shock absorber rings (fig.2).

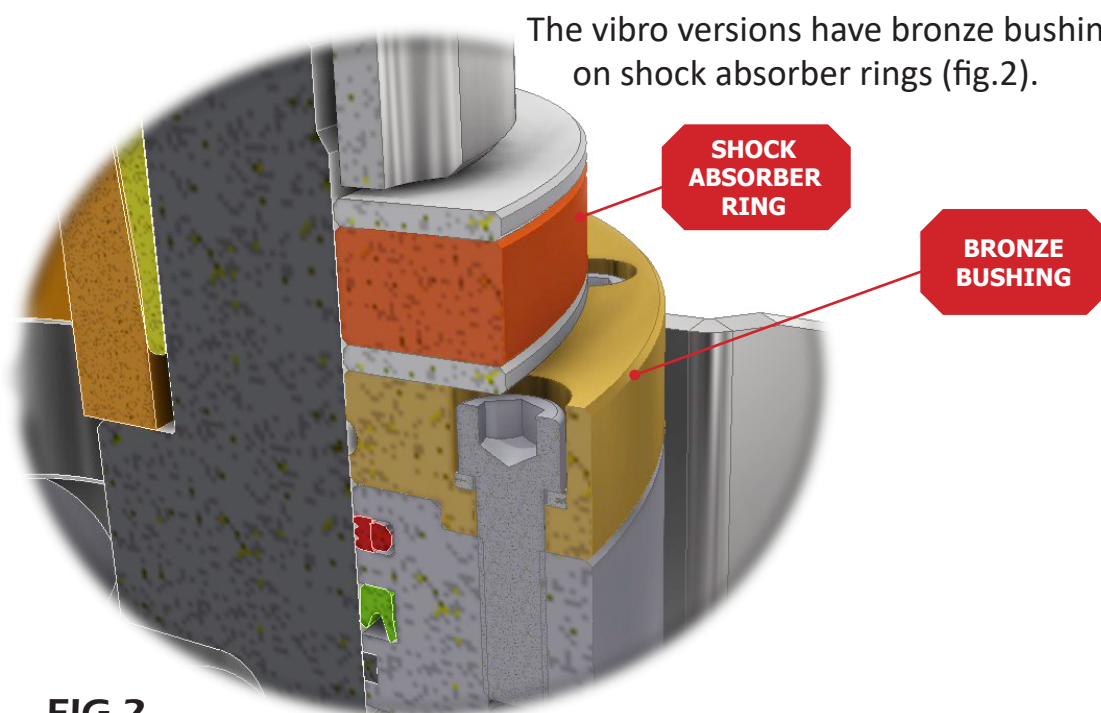


FIG.2

Rev. 1 (07/2026)



The bigger version of ejection head has ball bearings and rotative seals (fig.3) and is suitable for rods diameter up to 127 mm.

SEAL PACK

BEARING

The seal packs works on chromed surface balancing rod and are adjustable to prevent leaking (due to wearing) using setting screws placed on the customizable flange body (fig.4).

SEAL PACK
SETTING
SCREWS

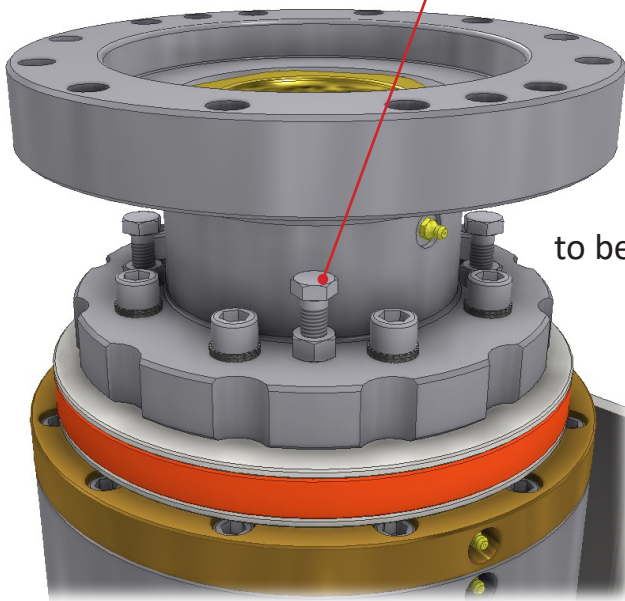


FIG.3

Both the flanged adapters for upper and lower rotaries are fully customizable. The length of the inner rod and the position and length of the chromed surface are to be defined and depends on the drill and is to be defined by the customer.

ANTI
ROTATION
BRACKET

FIG.4

The anti-rotation brackets are fully customizable and have shock absorber joints (fig.5).

SHOCK
ABSORBER

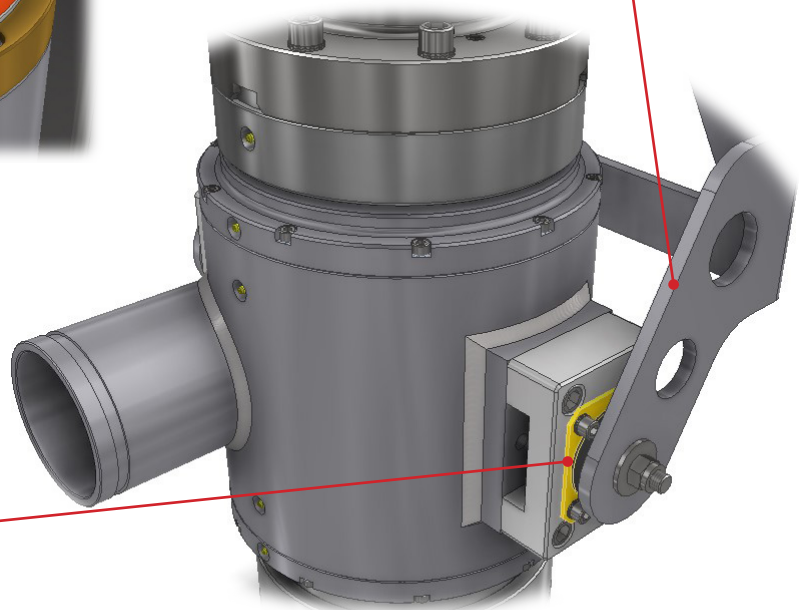
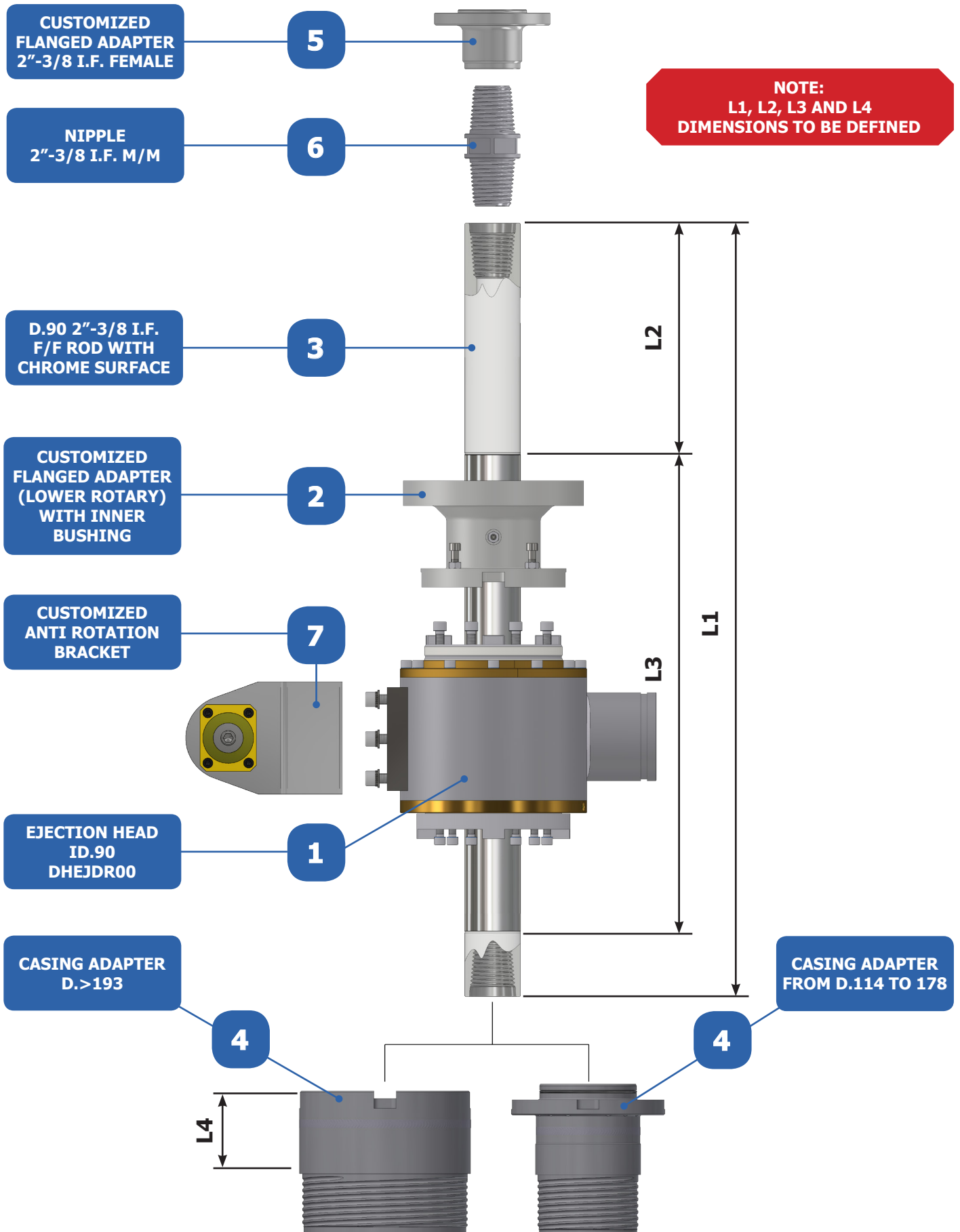


FIG.5



1) DRIVER EJECTION HEAD ID.90 (ROTATION DRILLING)

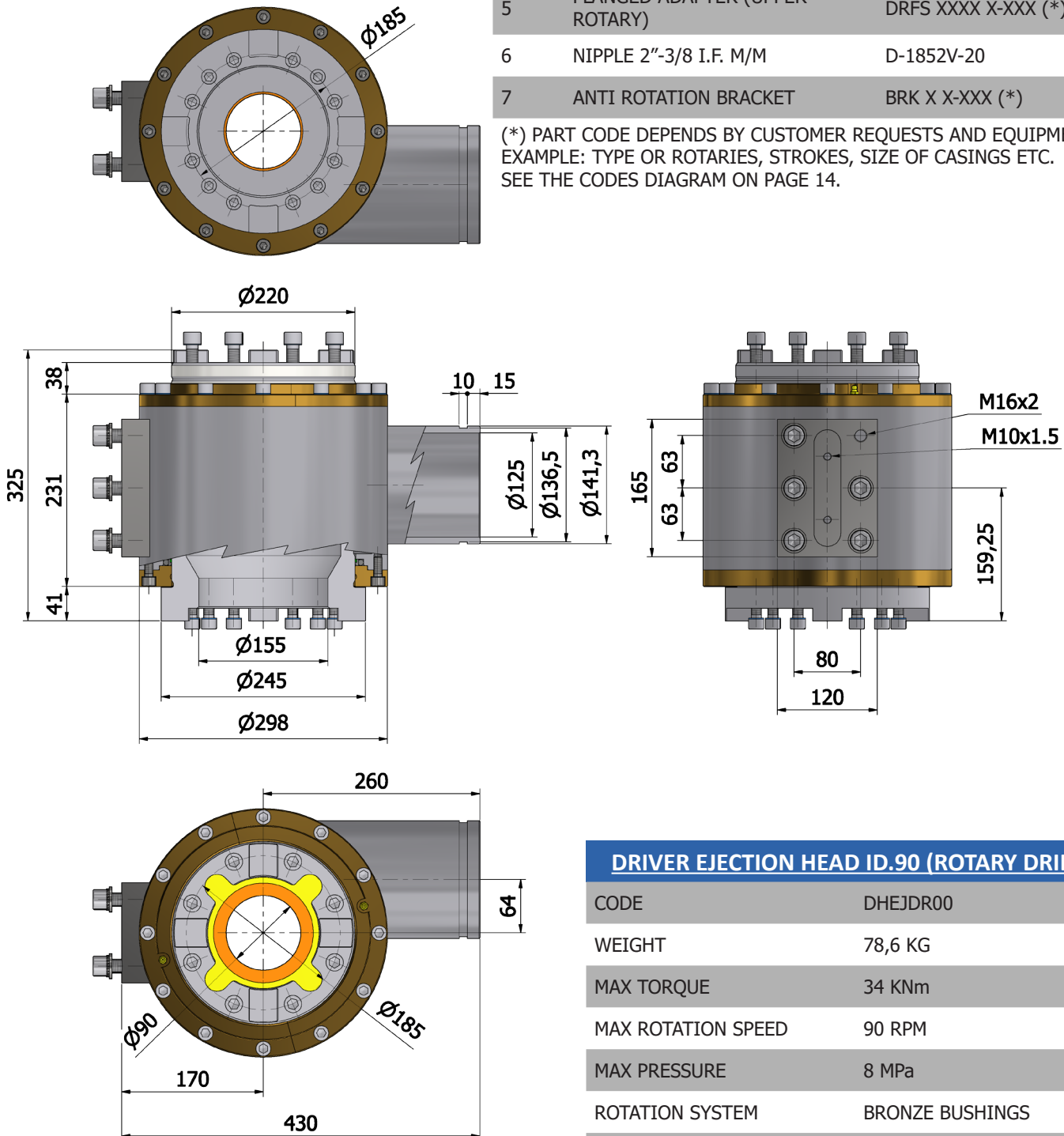




TYPICAL KIT PARTS LIST

ITEM	DESCRIPTION	CODE
1	DRIVER HEJECTION HEAD ID.90	DHEJDR00
2	FLANGED ADAPTER (LOWER ROTARY) WITH INNER BUSHING	DRAF0R-XXXX (*)
3	ROD WITH CHROME SURFACE	DRAXX-XXXX XXXX XX X (*)
4	CASING ADAPTER	DHEJDR0R XXX XX X XXX (*)
5	FLANGED ADAPTER (UPPER ROTARY)	DRFS XXXX X-XXX (*)
6	NIPPLE 2"-3/8 I.F. M/M	D-1852V-20
7	ANTI ROTATION BRACKET	BRK X X-XXX (*)

(*) PART CODE DEPENDS BY CUSTOMER REQUESTS AND EQUIPMENT. FOR EXAMPLE: TYPE OR ROTARIES, STROKES, SIZE OF CASINGS ETC. SEE THE CODES DIAGRAM ON PAGE 14.

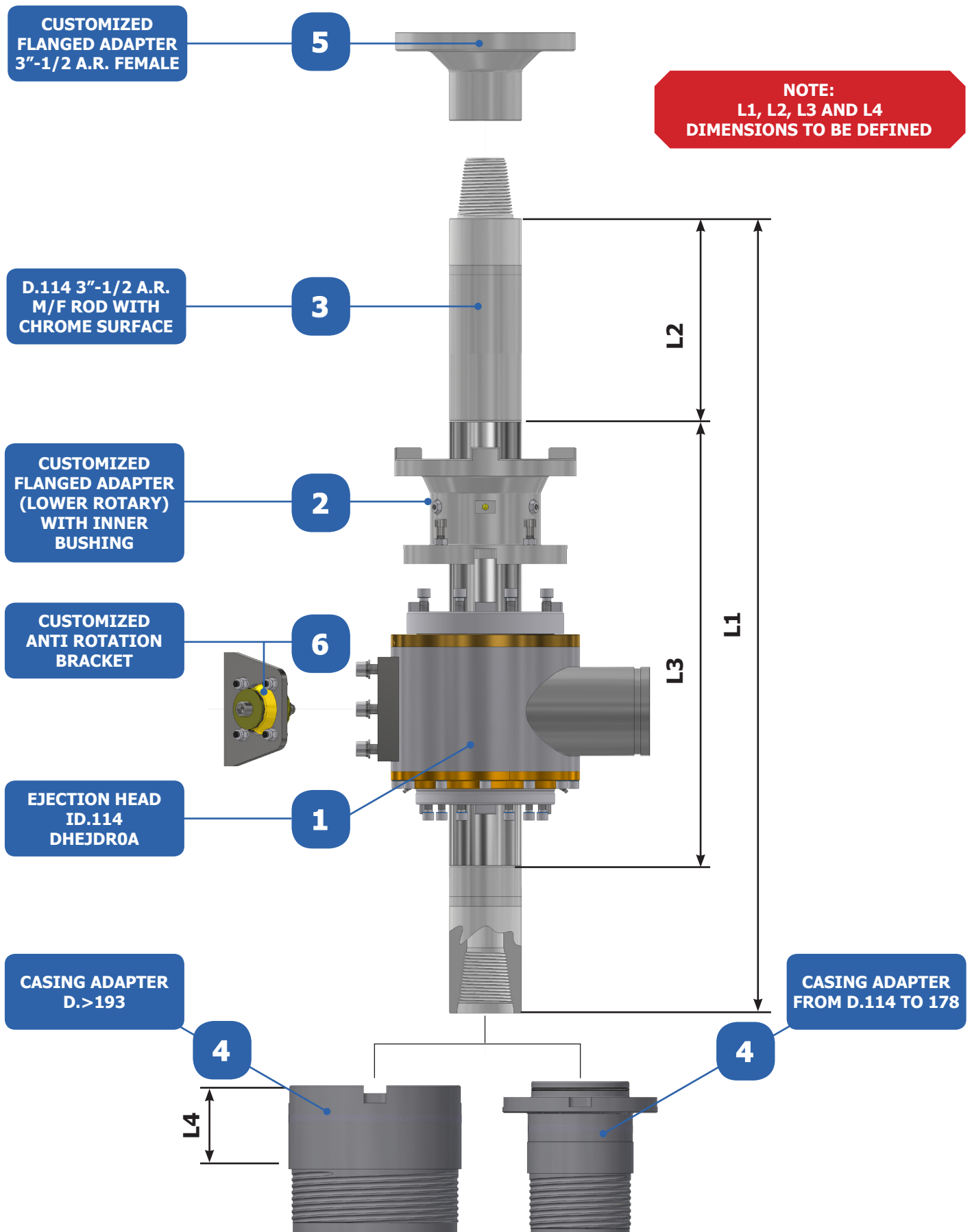


DRIVER EJECTION HEAD ID.90 (ROTARY DRILLING)

CODE	DHEJDR00
WEIGHT	78,6 KG
MAX TORQUE	34 KNm
MAX ROTATION SPEED	90 RPM
MAX PRESSURE	8 MPa
ROTATION SYSTEM	BRONZE BUSHINGS
STANDARD OUTLET TYPE	5" VICTAULIC GROOVE



2) DRIVER EJECTION HEAD ID.114 (ROTATION DRILLING)

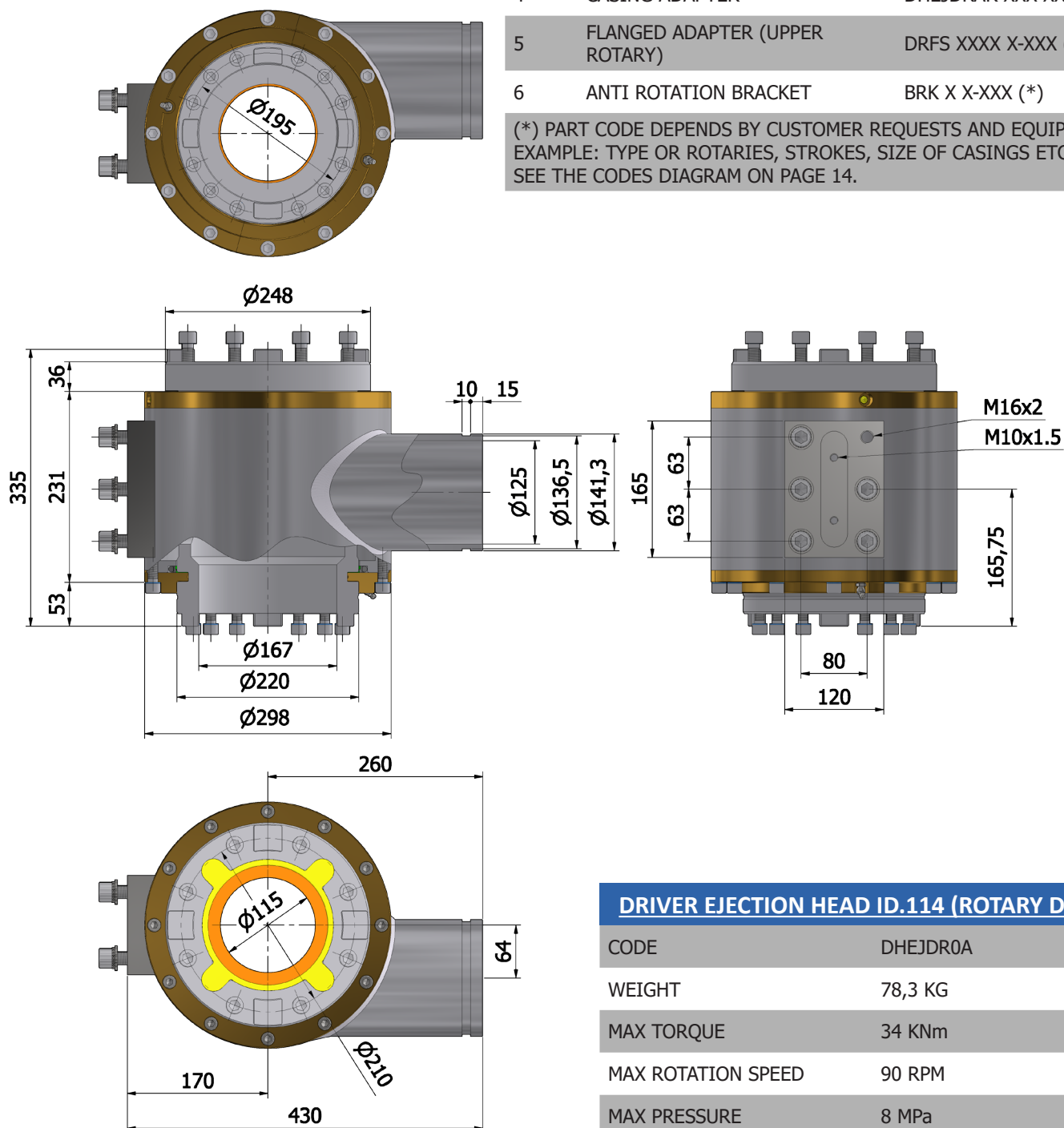




TYPICAL KIT PARTS LIST

ITEM	DESCRIPTION	CODE
1	DRIVER HEJECTION HEAD ID.114	DHEJDR0A
2	FLANGED ADAPTER (LOWER ROTARY) WITH INNER BUSHING	DRAF1R-XXXX (*)
3	ROD WITH CHROME SURFACE	DRA XX-XXXX XXXX XX X (*)
4	CASING ADAPTER	DHEJDRAR XXX XX X XXX (*)
5	FLANGED ADAPTER (UPPER ROTARY)	DRFS XXXX X-XXX (*)
6	ANTI ROTATION BRACKET	BRK X X-XXX (*)

(*) PART CODE DEPENDS BY CUSTOMER REQUESTS AND EQUIPMENT. FOR EXAMPLE: TYPE OR ROTARIES, STROKES, SIZE OF CASINGS ETC. SEE THE CODES DIAGRAM ON PAGE 14.

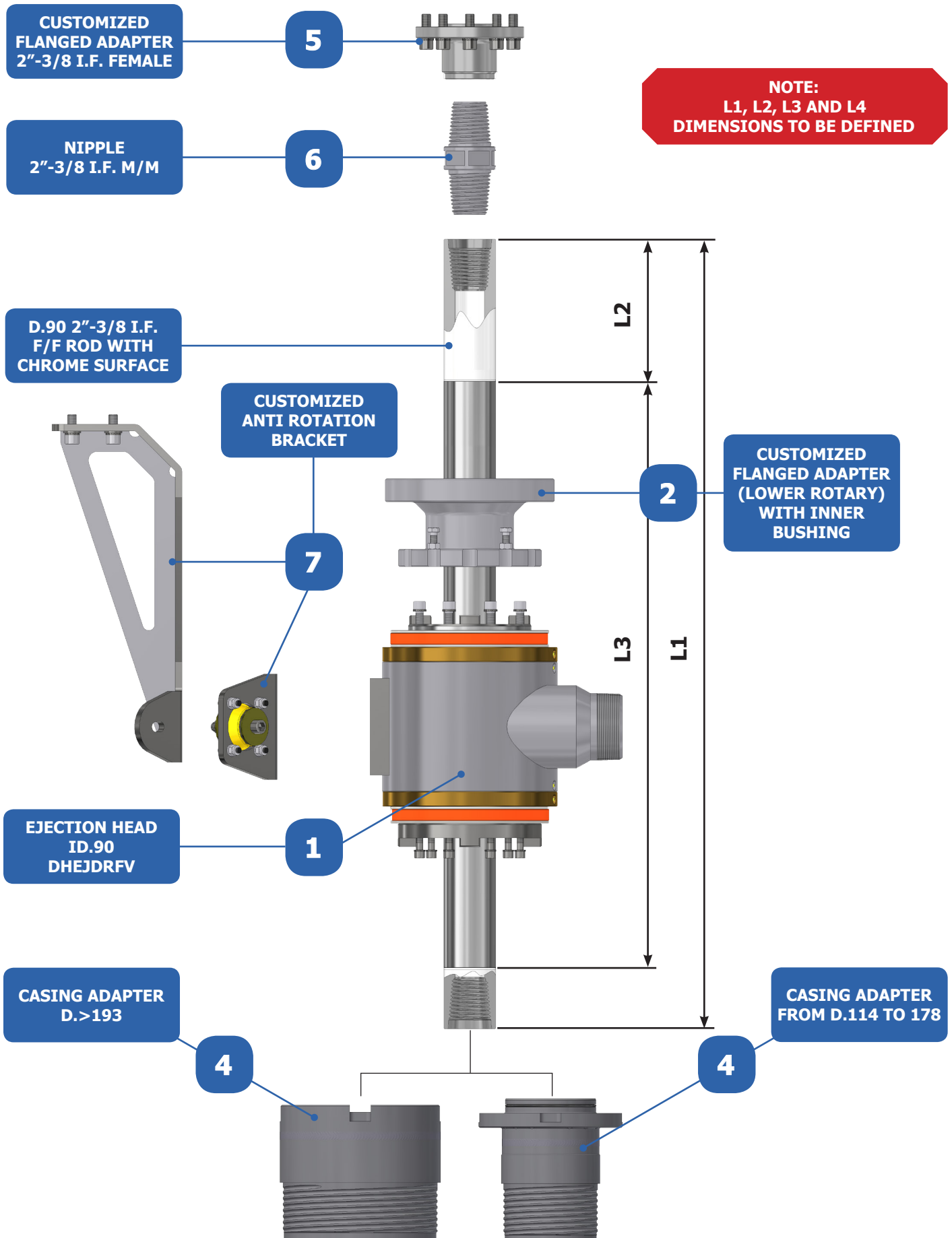


DRIVER EJECTION HEAD ID.114 (ROTARY DRILLING)

CODE	DHEJDR0A
WEIGHT	78,3 KG
MAX TORQUE	34 KNm
MAX ROTATION SPEED	90 RPM
MAX PRESSURE	8 MPa
ROTATION SYSTEM	BRONZE BUSHINGS
STANDARD OUTLET TYPE	5" VICTAULIC GROOVE



3) DRIVER EJECTION HEAD ID.90 (VIBRATION DRILLING)

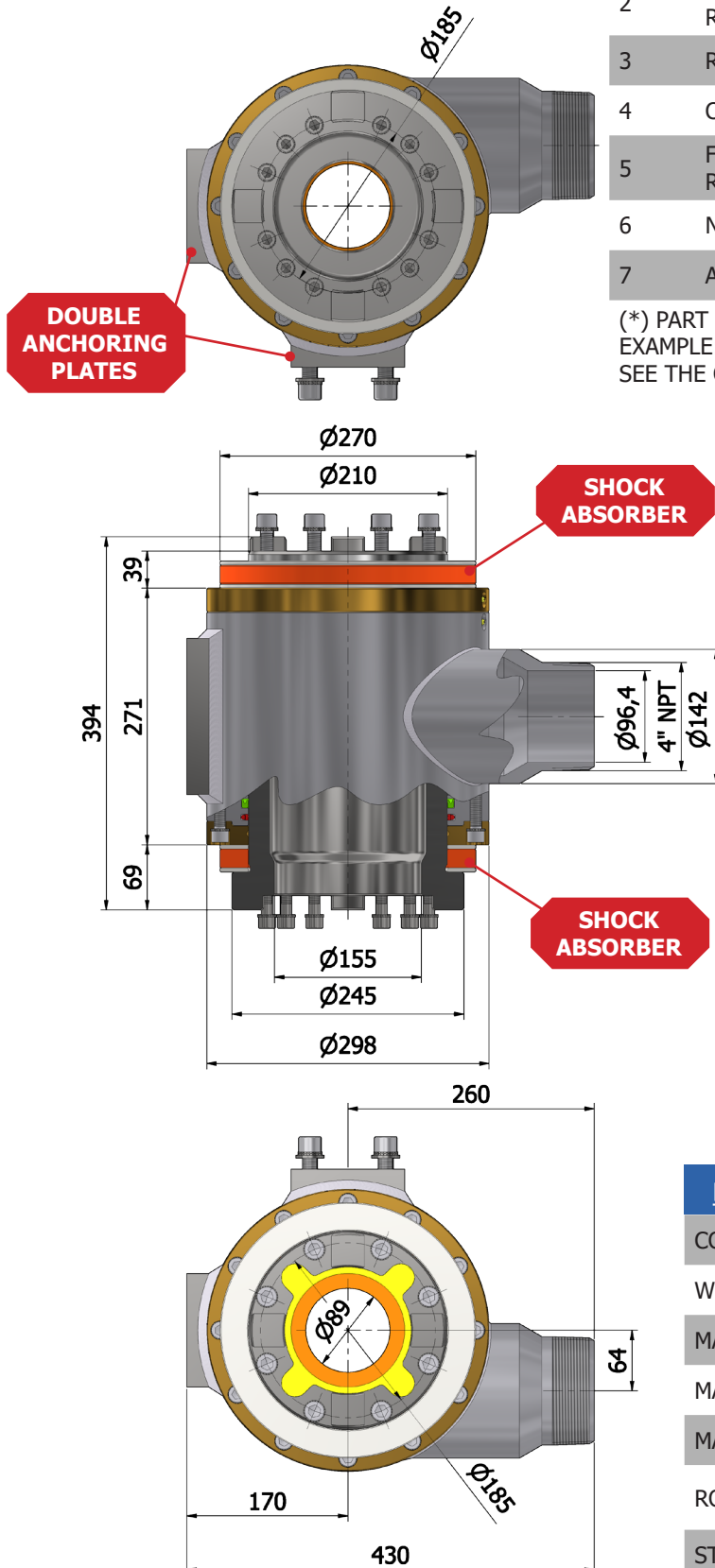




TYPICAL KIT PARTS LIST

ITEM	DESCRIPTION	CODE
1	DRIVER HEJECTION HEAD ID.90	DHEJDRFV0
2	FLANGED ADAPTER (LOWER ROTARY) WITH INNER BUSHING	DRAF0V-XXXX (*)
3	ROD WITH CHROME SURFACE	DRA XX-XXXX XXXX XX X (*)
4	CASING ADAPTER	DHEJDR0R XXX XX X XXX (*)
5	FLANGED ADAPTER (UPPER ROTARY)	DRFS XXXX X-XXX (*)
6	NIPPLE 2"-3/8 I.F. M/M	D-1852V-20
7	ANTI ROTATION BRACKET	BRKV X-XXX (*)

(*) PART CODE DEPENDS BY CUSTOMER REQUESTS AND EQUIPMENT. FOR EXAMPLE: TYPE OR ROTARIES, STROKES, SIZE OF CASINGS ETC. SEE THE CODES DIAGRAM ON PAGE 14.

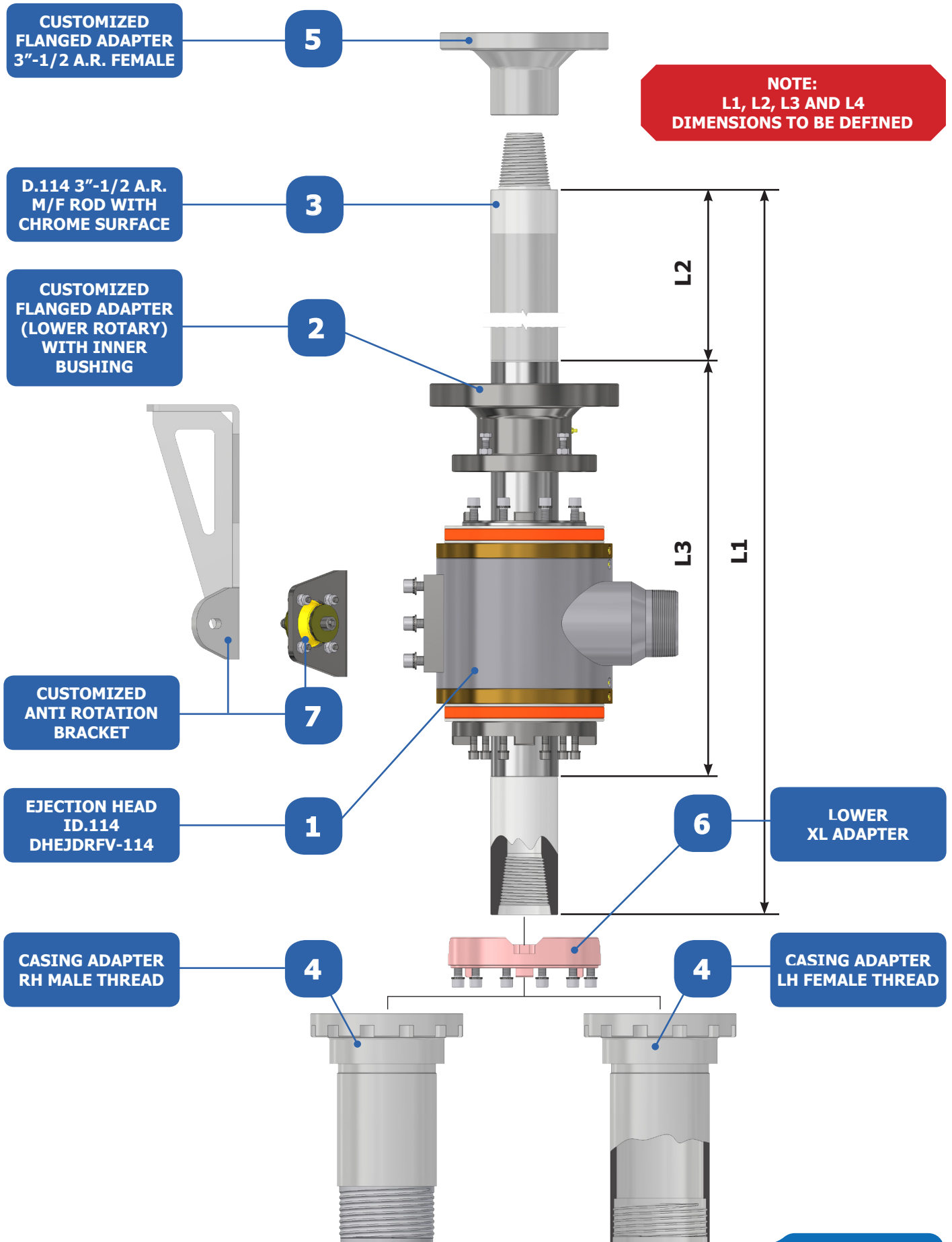


DRIVER EJECTION HEAD ID.90 (VIBRATION DRILLING)

CODE	DHEJDRFV
WEIGHT	110,7 KG
MAX TORQUE	34 KNm
MAX ROTATION SPEED	120 RPM
MAX PRESSURE	8 MPa
ROTATION SYSTEM	BRONZE BUSHINGS WITH SHOCK ABSORBER FLOATING RINGS
STANDARD OUTLET TYPE	4" NPT THREAD



4) DRIVER EJECTION HEAD ID.114 (VIBRATION DRILLING)

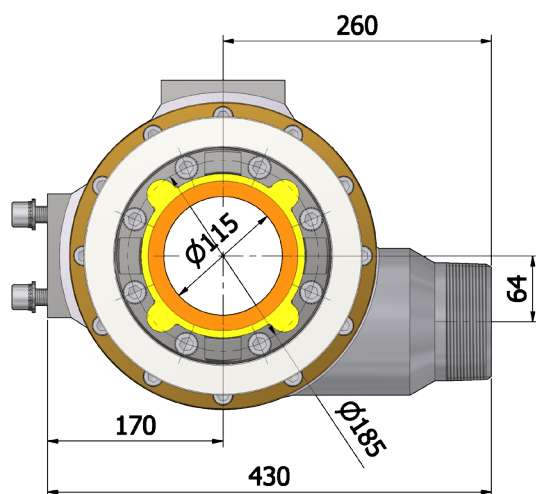
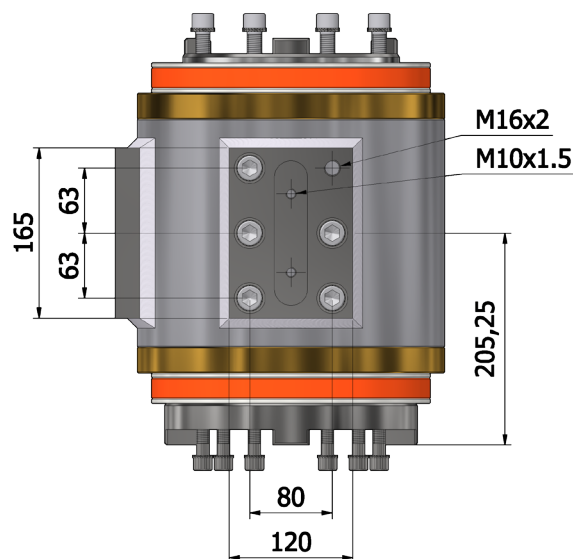
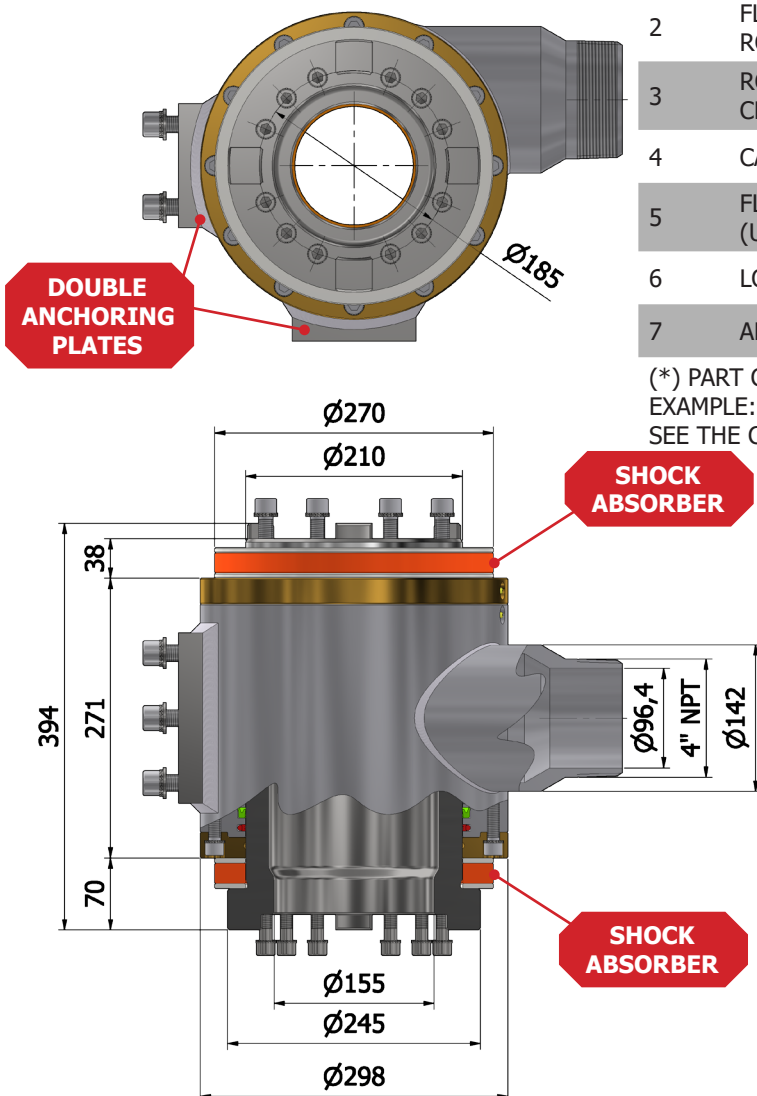




TYPICAL KIT PARTS LIST

ITEM	DESCRIPTION	CODE
1	DRIVER HEJECTION HEAD ID.114	DHEJDRFVA
2	FLANGED ADAPTER (LOWER ROTARY) WITH INNER BUSHING	DRAF1V-XXXX (*)
3	ROD 3"-1/2 A.R. M/F WITH CHROME SURFACE	DRA XX-312R 312R MF X (*)
4	CASING ADAPTER	DHEJDR0R XXX XX X XXX (*)
5	FLANGED ADAPTER 3"-1/2 A.R. F. (UPPER ROTARY)	DRFS 312R F-XXX (*)
6	LOWER XL ADAPTER	D-1852VXL-35
7	ANTI ROTATION BRACKET	BRKV X-XXX (*)

(*) PART CODE DEPENDS BY CUSTOMER REQUESTS AND EQUIPMENT. FOR EXAMPLE: TYPE OR ROTARIES, STROKES, SIZE OF CASINGS ETC. SEE THE CODES DIAGRAM ON PAGE 14.

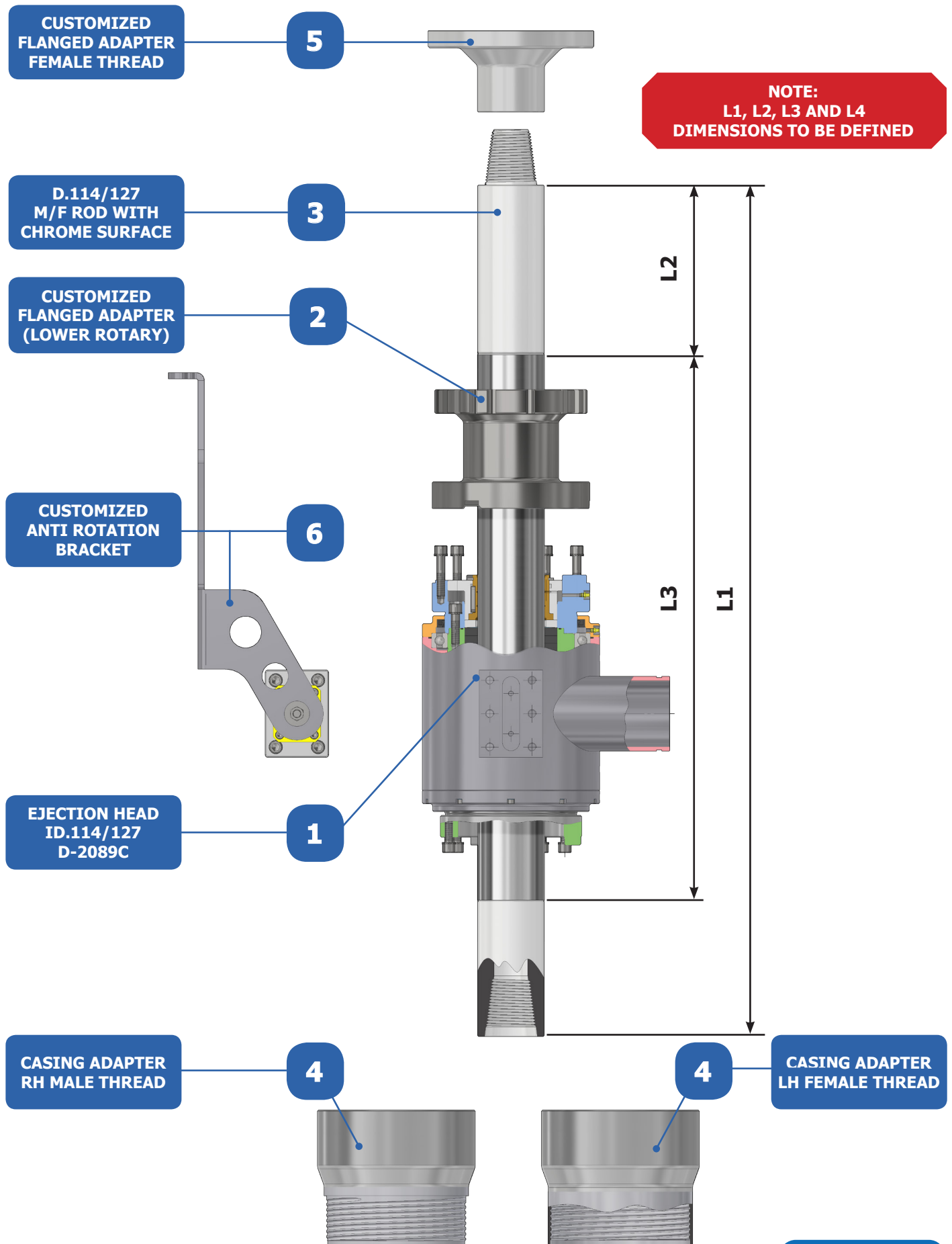


DRIVER EJECTION HEAD ID.114 (VIBRATION DRILLING)

CODE	DHEJDRFV-114
WEIGHT	106,8 KG
MAX TORQUE	34 KNm
MAX ROTATION SPEED	120 RPM
MAX PRESSURE	8 MPa
ROTATION SYSTEM	BRONZE BUSHINGS WITH SHOCK ABSORBER FLOATING RINGS
STANDARD OUTLET TYPE	4" NPT THREAD



5) DRIVER EJECTION HEAD ID. FROM 114 TO 127

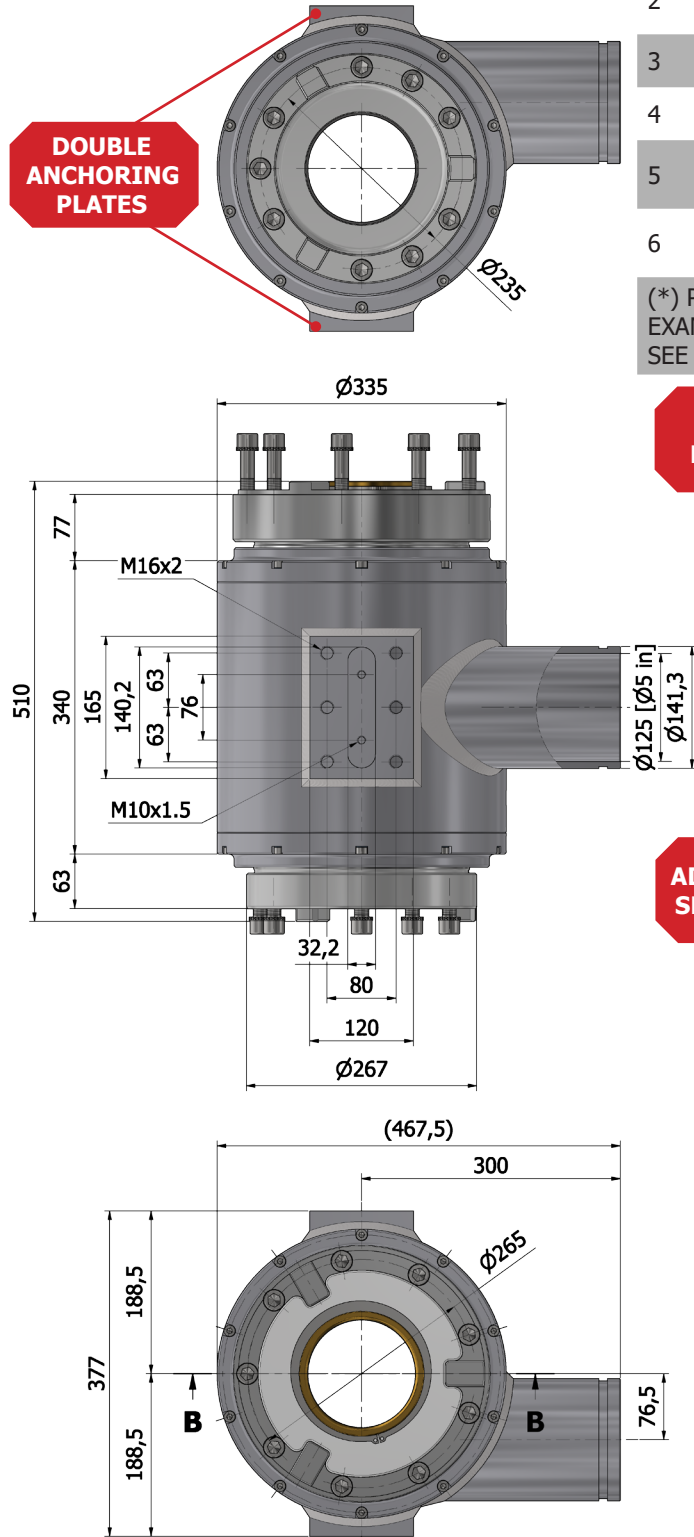




TYPICAL KIT PARTS LIST

ITEM	DESCRIPTION	CODE
1	DRIVER HEJECTION HEAD ID.114/127	DHEJDRC0
2	FLANGED ADAPTER (LOWER ROTARY)	DRAF2V-XXXX (*)
3	ROD WITH CHROME SURFACE	C XX XX-XXXX XXXX-XX X (*)
4	CASING ADAPTER	DHEJDRCR XXX XX X XXX (*)
5	FLANGED ADAPTER (UPPER ROTARY)	DRFS XXX X-XXX(*)
6	ANTI ROTATION BRACKET WITH SHOCK ABSORBER	BRKV X-XXX (*)

(*) PART CODE DEPENDS BY CUSTOMER REQUESTS AND EQUIPMENT. FOR
EXAMPLE: TYPE OR ROTARIES, STROKES, SIZE OF CASINGS ETC.
SEE THE CODES DIAGRAM ON PAGE 14.

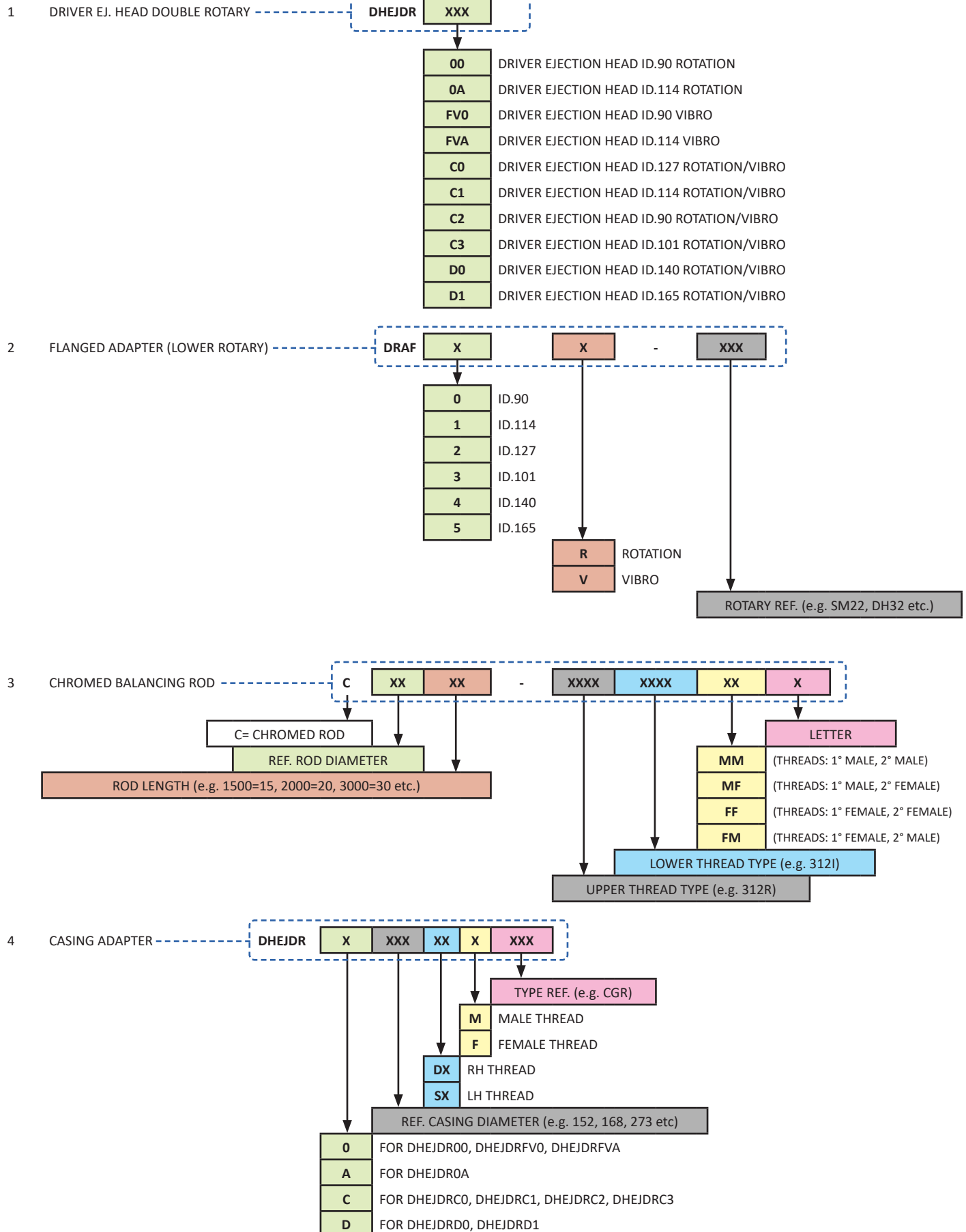


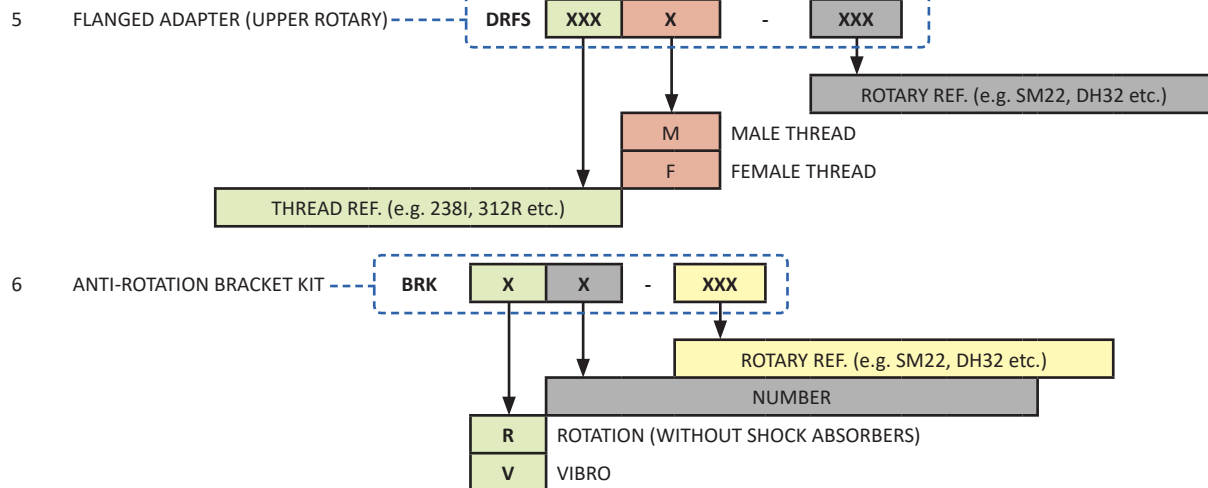
DRIVER EJECTION HEAD ID.114/127

CODE	D-2089C
WEIGHT	181,5 KG
MAX TORQUE	42 KNm
MAX ROTATION SPEED	180 RPM
MAX PRESSURE	10 MPa
ROTATION SYSTEM	BALL BEARINGS
STANDARD OUTLET TYPE	5" VICTAULIC GROOVE



6) PARTS CODING DIAGRAM





The Rotary Kit is an optimized drilling rig configuration for jet grouting (when it is not possible having a chuck).

This Kit allows to position the high-pressure swivel on top rather than under the rotary. This has a double advantage:

(i) you can have all the rig stroke and
(ii) you can transmit all the torque and pull available without affecting the swivel that will only withstand the high-pressure grout mix.

An under rotary swivel will not let you have all the rig stroke and will also take, other than the high-pressure grout mix, the rotary torque, pull and push and it might also be subjected to eccentric rotation with detriment to the grout seals life.

This system is suitable for any rotary type and for single, double or triple fluid jetting rods. Our technical office will design the upper and lower adapters to fit the rotary interface flanges, the pipes passing through the rotary main shaft and all the parts needed to complete the kit.

AVAILABLE FOR
SINGLE, DOUBLE
AND TRIPLE FLUID
SYSTEMS

SWIVEL

SWIVEL ADAPTER
CUSTOMIZED FOR
ROTARY TYPE

FLUIDS PASSAGES
INTO THE MAIN
ROTARY SHAFT

ROD ADAPTER
CUSTOMIZED FOR
ROTARY TYPE



Scan me!



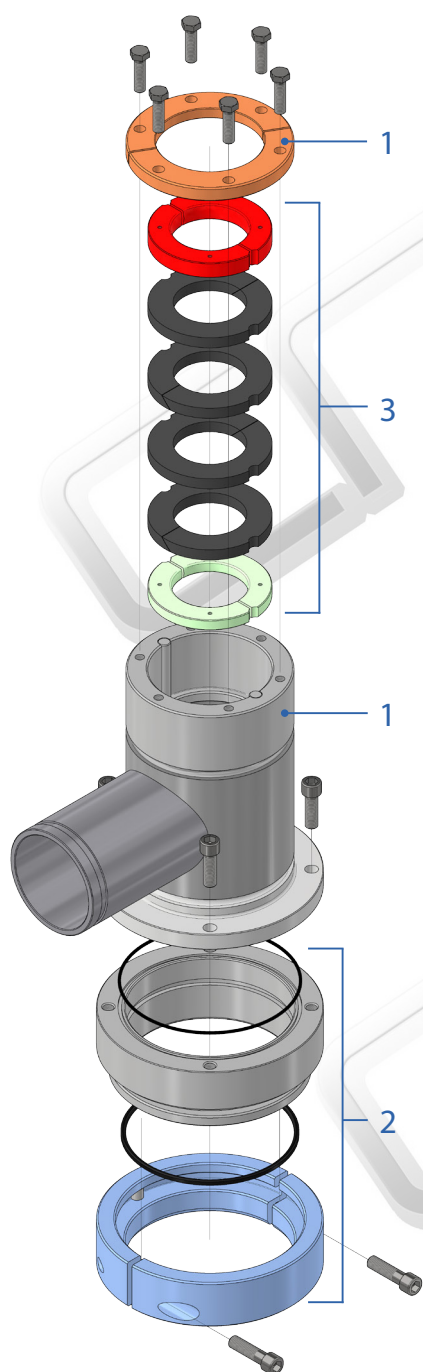
CRM s.r.l.
Via E. Torricelli, 23
00015 Monterotondo Scalo (Rm)
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Fax +39 0690087595

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info@crmjetting.it

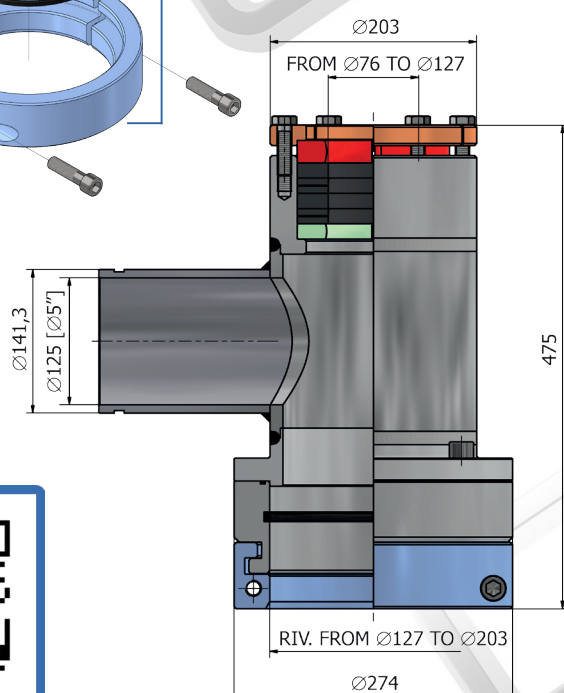
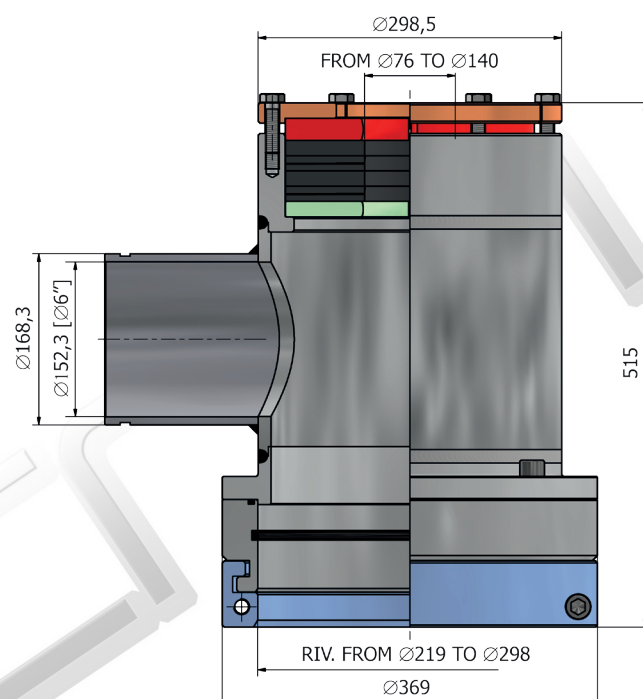
P. IVA 01333541009 C.F. 04964190583



Azienda Certificata
ISO 9001 / UNI EN ISO 9001:2008
Certificato N° IT00/0007



ITEM	DESCRIPTION	CODE
1	MODULAR DIVERTER TYPE "A" 127-203	MDVA
1	MODULAR DIVERTER TYPE "B" 219-298	MDVB
2	MODULAR DIVERTER FLANGE 152	FDVA152
2	MODULAR DIVERTER FLANGE 168	FDVA168
2	MODULAR DIVERTER FLANGE 178	FDVA178
2	MODULAR DIVERTER FLANGE 203	FDVA203
2	MODULAR DIVERTER FLANGE 219	FDVB219
2	MODULAR DIVERTER FLANGE 244	FDVB244
2	MODULAR DIVERTER FLANGE 273	FDVB273
2	MODULAR DIVERTER FLANGE 298	FDVB298
3	SEAL KIT 76 FOR MODULAR DIVERTER TYPE "A"	KDVA76
3	SEAL KIT 90 FOR MODULAR DIVERTER TYPE "A"	KDVA90
3	SEAL KIT 114 FOR MODULAR DIVERTER TYPE "A"	KDVA114
3	SEAL KIT 127 FOR MODULAR DIVERTER TYPE "A"	KDVA127
3	SEAL KIT 76 FOR MODULAR DIVERTER TYPE "B"	KDVB76
3	SEAL KIT 90 FOR MODULAR DIVERTER TYPE "B"	KDVB90
3	SEAL KIT 114 FOR MODULAR DIVERTER TYPE "B"	KDVB114
3	SEAL KIT 127 FOR MODULAR DIVERTER TYPE "B"	KDVB127
3	SEAL KIT 140 FOR MODULAR DIVERTER TYPE "B"	KDVB140

**MODULAR DIVERTER TYPE "A"****MODULA DIVERTER TYPE "B"**

Scan me!



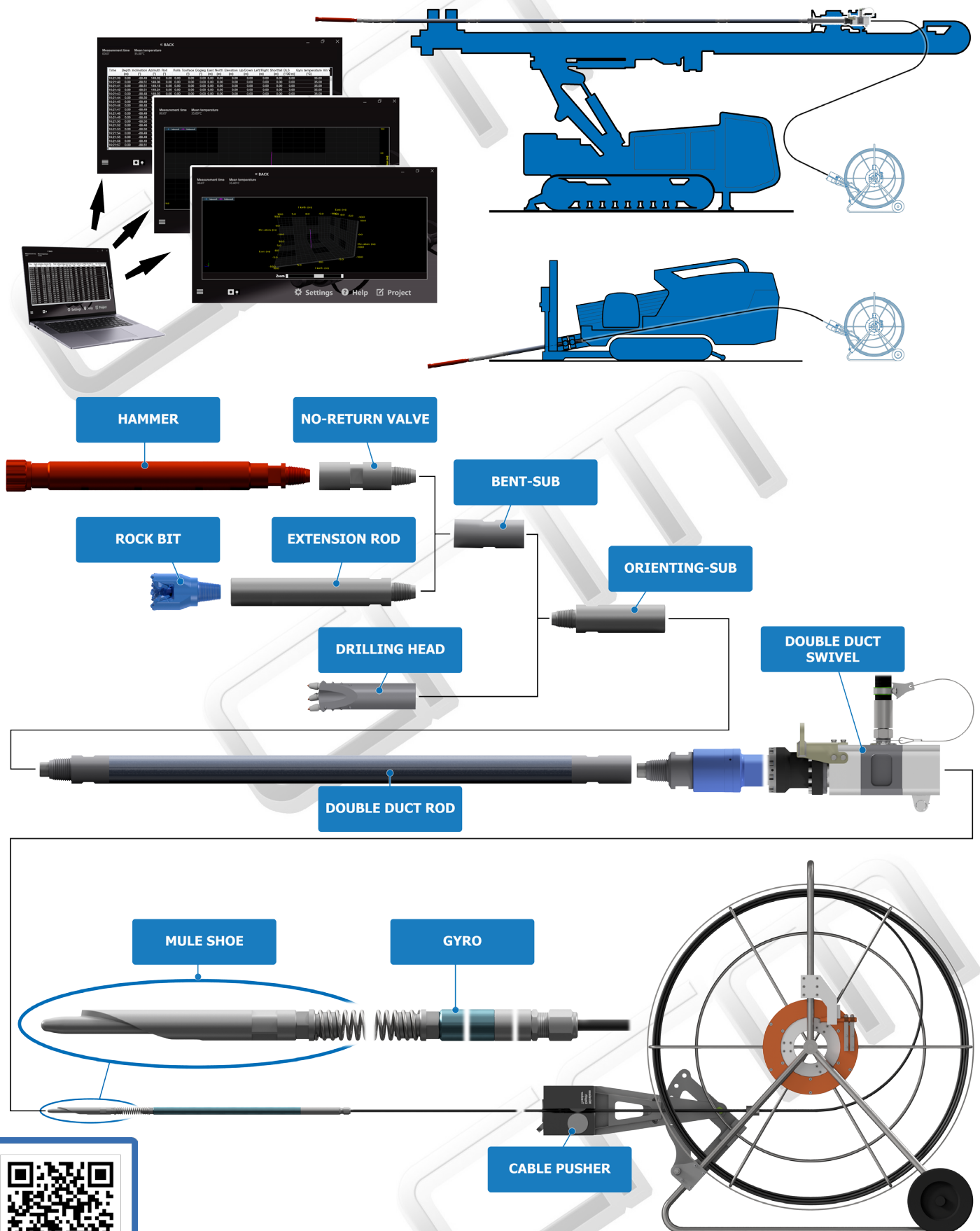
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Certificato N° IT00/0007



Advanced Borehole Position Tracking for Geotechnical Applications

THE SYSTEM AT A GLANCE

Motorized Reel System + Wassara Explorer Gyroscope
High precision, fully automated measurement solution
designed for horizontal borehole trajectory control

Why Choose This System?

- Innovation and Accuracy in Every Measurement.
- Independently operating measurement system.
- No magnetic rods, no surface receivers, no downhole emitters.
- Completely immune to magnetic fields and electrical noise.
- Fully repeatable borehole surveys.
- Repeat measurements along the entire borehole path, even during drilling operations.
- Horizontal Ready: Ideal for tunneling (freezing, cement injection, well connections).

THE HEART OF THE SYSTEM

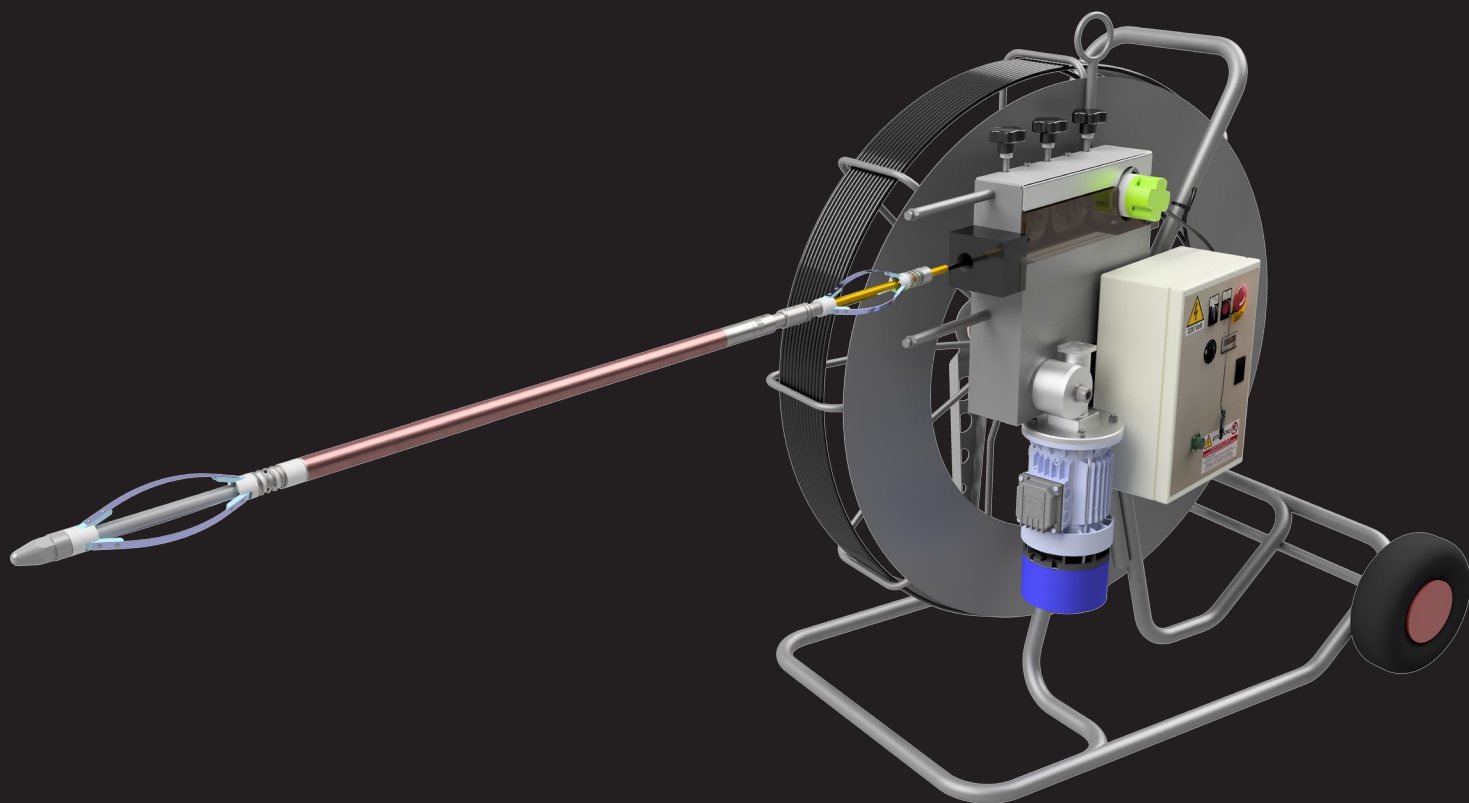
Wassara Explorer Gyroscope

Unmatched accuracy for determining borehole position, azimuth, and inclination. Reliable even in highly disturbed environments.

AUTOMATED PRECISION

CRM Motorized Reel System

Designed to enhance the gyroscope's performance through automation and control



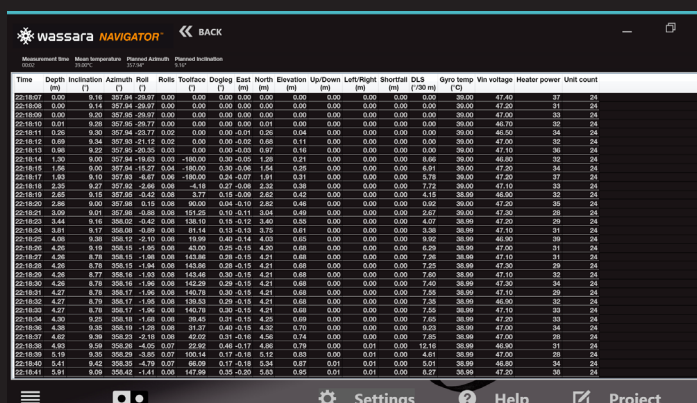
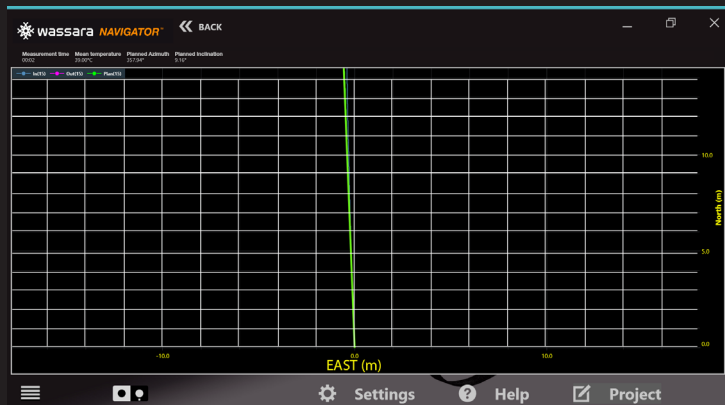
Key Features:

1. Depth Counter: Precise depth tracking at every stage.
2. Variable-Speed Potentiometer: Smooth and controlled probe deployment.
3. Safety Limit Switch: Protection during insertion and retrieval.
4. Integrated Slip Rings: Continuous and stable data transmission.



Live Data Interface:

A clear, immediate view of all measurements via laptop display. Perfect for on-site decision making and operational efficiency. Image suggestion: laptop zoom with real-time trajectory data.

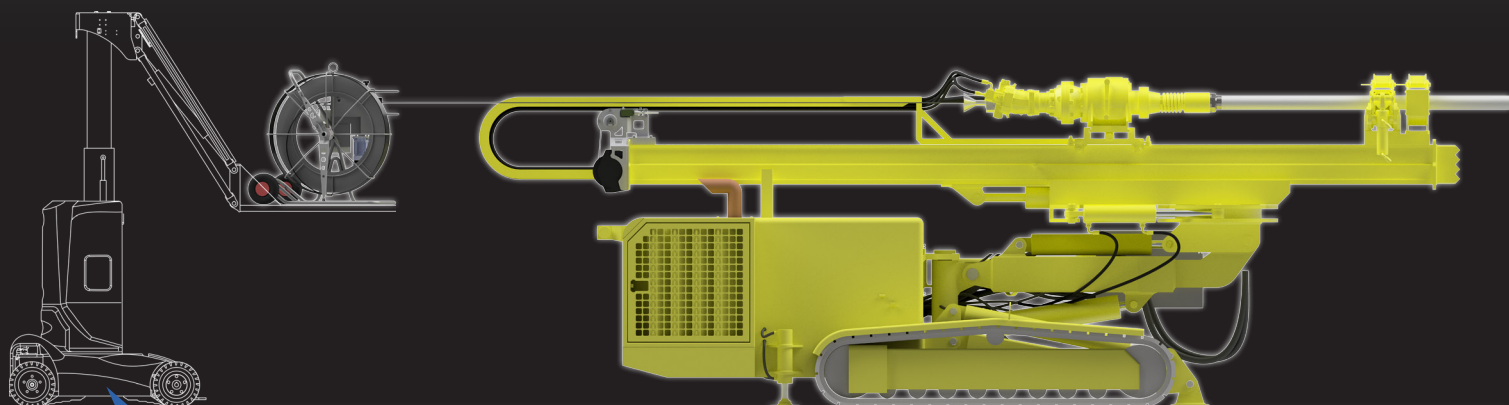




APPLICATIONS

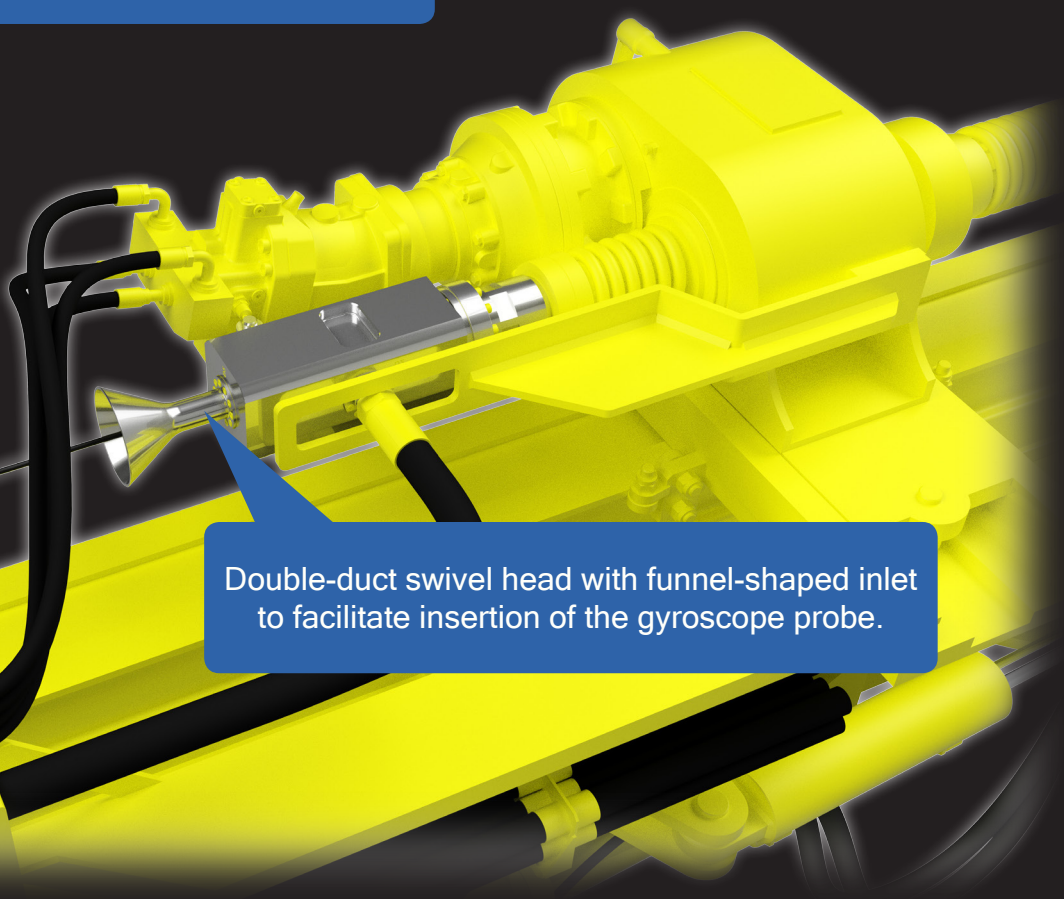
Where the System Delivers Its Best

- Horizontal drilling in tunnel construction
- Ground freezing operations
- Cement and grout injection lines
- Well to well alignment
- Jetting trajectory measurement



OPTIONAL!

BATTERY POWERED TELESCOPIC BOOM LIFT



Double-duct swivel head with funnel-shaped inlet to facilitate insertion of the gyroscope probe.

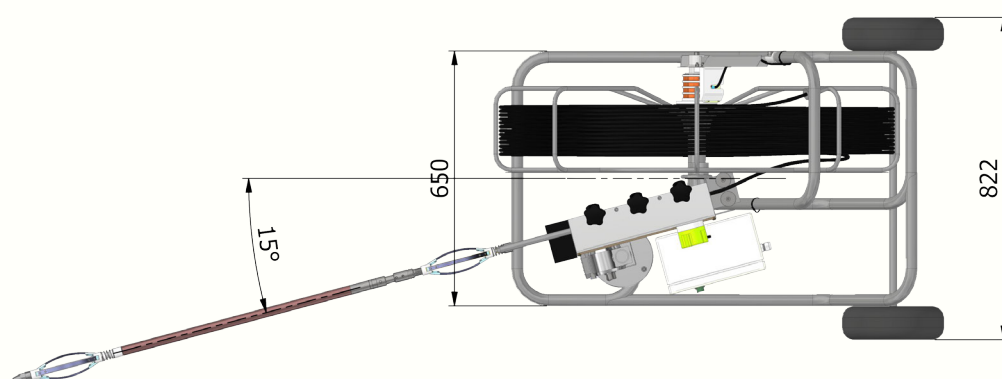
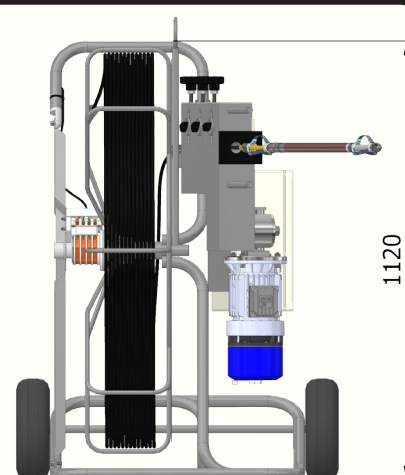
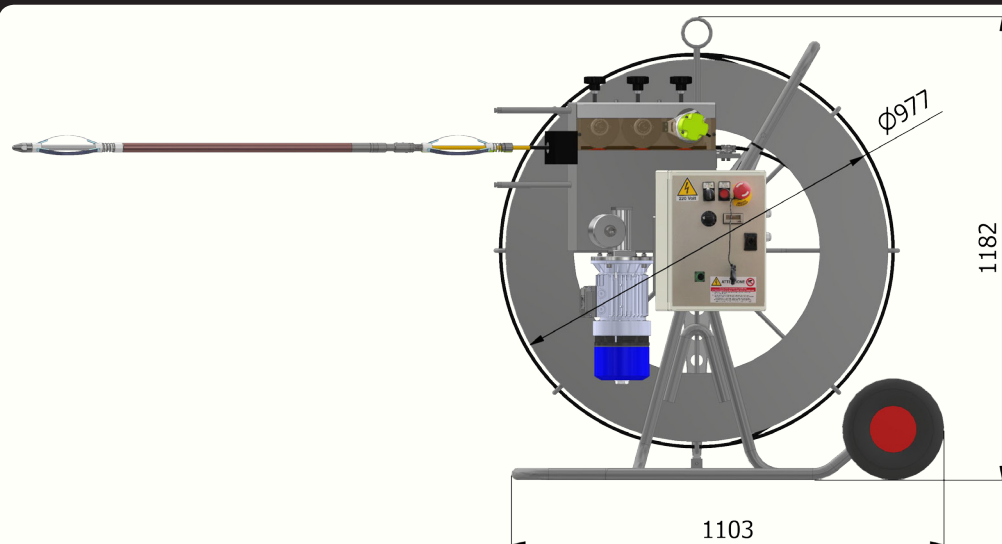


THE COMPLETE SOLUTION FOR MODERN GEOTECHNICS!

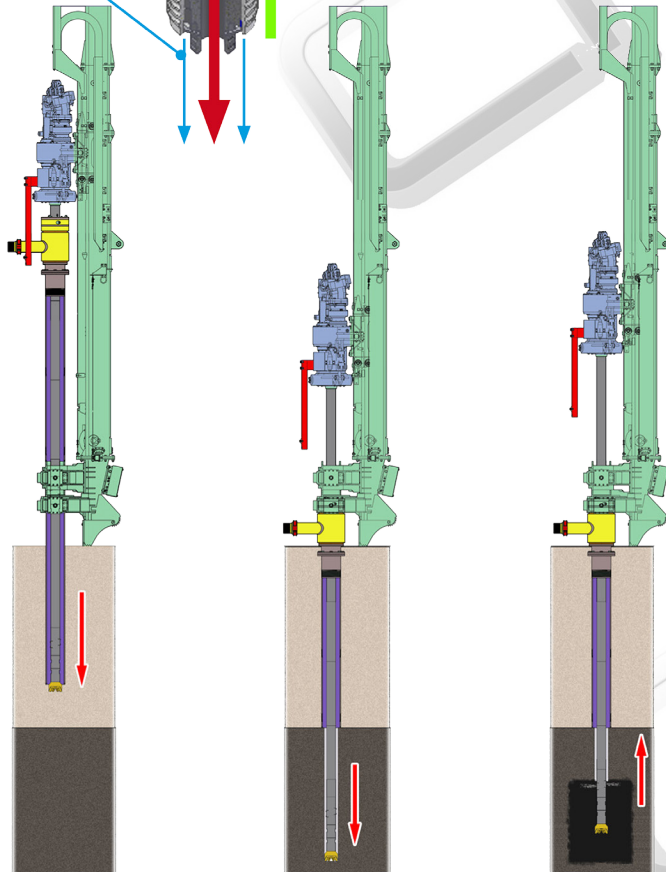
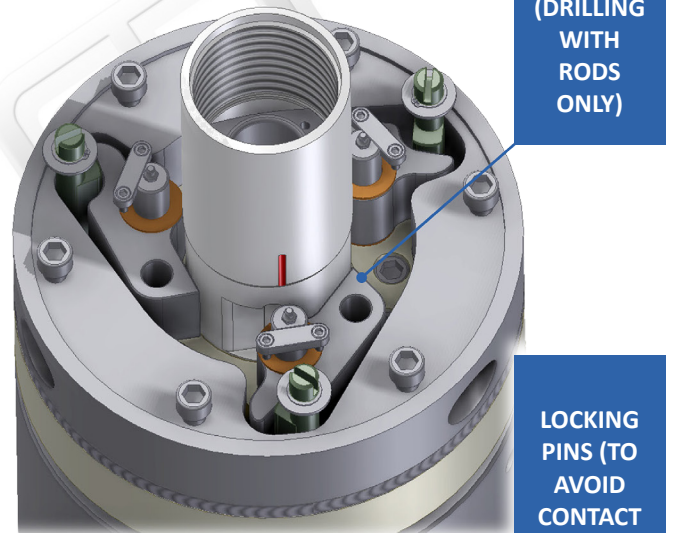
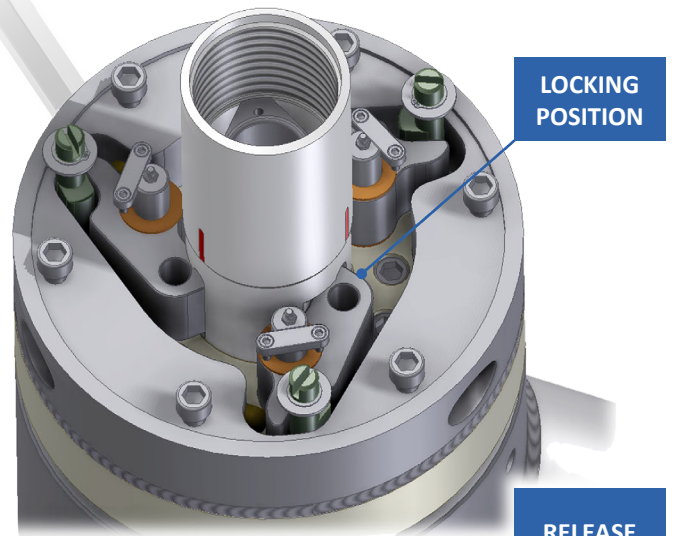
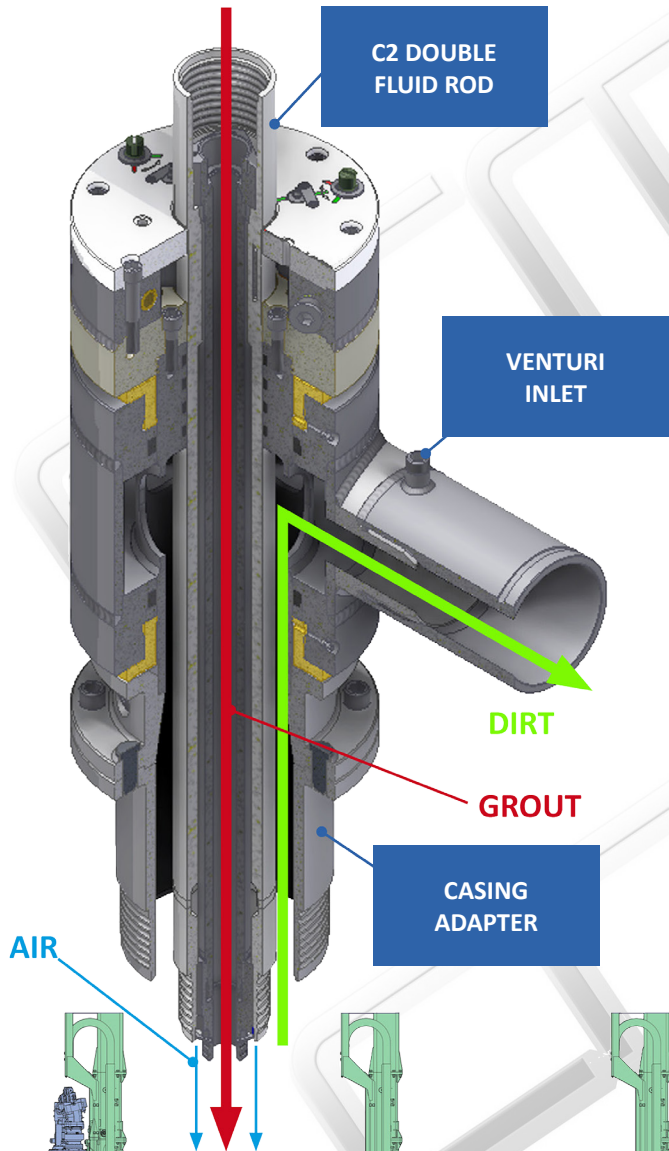
Accuracy, automation, and reliability working together.

TECHNICAL DATA

- CE Certification No.: 4007-07
- Compliant with Directive: 98 / 37 / CE
- Power Supply: 230 V, 50 Hz (Single-phase + Neutral + Earth)
- Power Rating: 0.6 kW
- Protection Rating: IP 54
- Push / Pull Force on Cable: 935 N ($\cong$ 95 Kgf)
- Weight: 90 kg
- Maximum Wound Cable Length: 250 m (diameter = 9 mm)



Scan me!



"ON" POSITION
(OVERBURDEN DRILLING)

"OFF" POSITION
(DRILLING WITH INNER RODS)

"OFF" POSITION
(JETTING STEP)



Scan me!



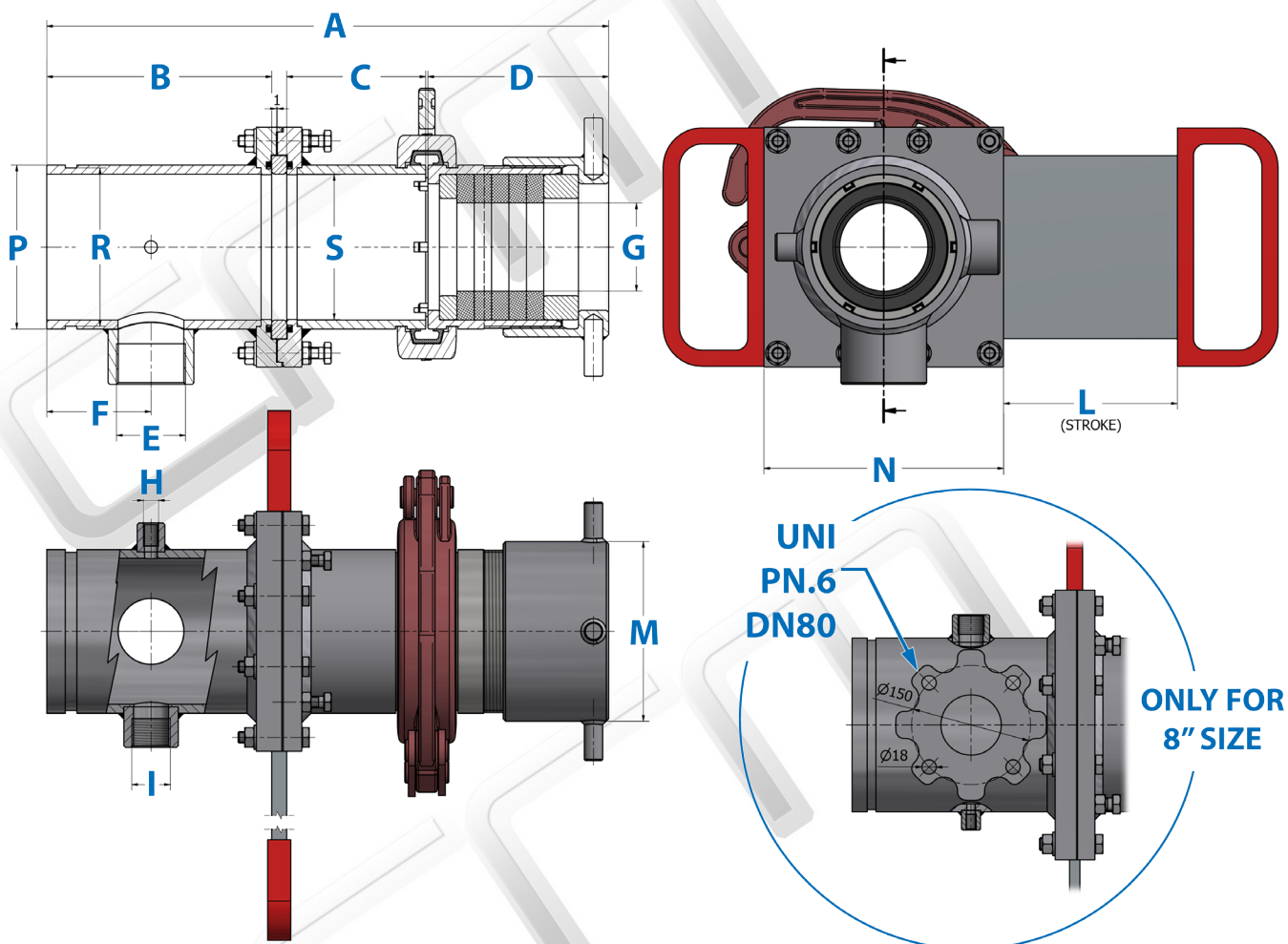
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PREVENTER SIZE	G (RODS DIAMETERS)	A	B	C	D	E	F	H	I	L	M	N	P	R	S
4"	60; 63,5	398	198	83	115	2"G	90	1/4"G	1"G	120	150	180	114	109,5	98,3
5"	76,1; 88,9; 101,6	485	194	120	156	2"G	90	1/4"G	1"G	150	155	207	141,3	136,5	125
6"	114,3; 127; 133	550	194	150	192	2"1/2 G	90	1/4"G	1"G	190	218	260	168,3	163,4	152
8"	140; 152; 168; 178	594	256	132	156	UNI PN.6	150	1/4"G	1"G	240	228	340	219,1	213,8	199


Scan me!



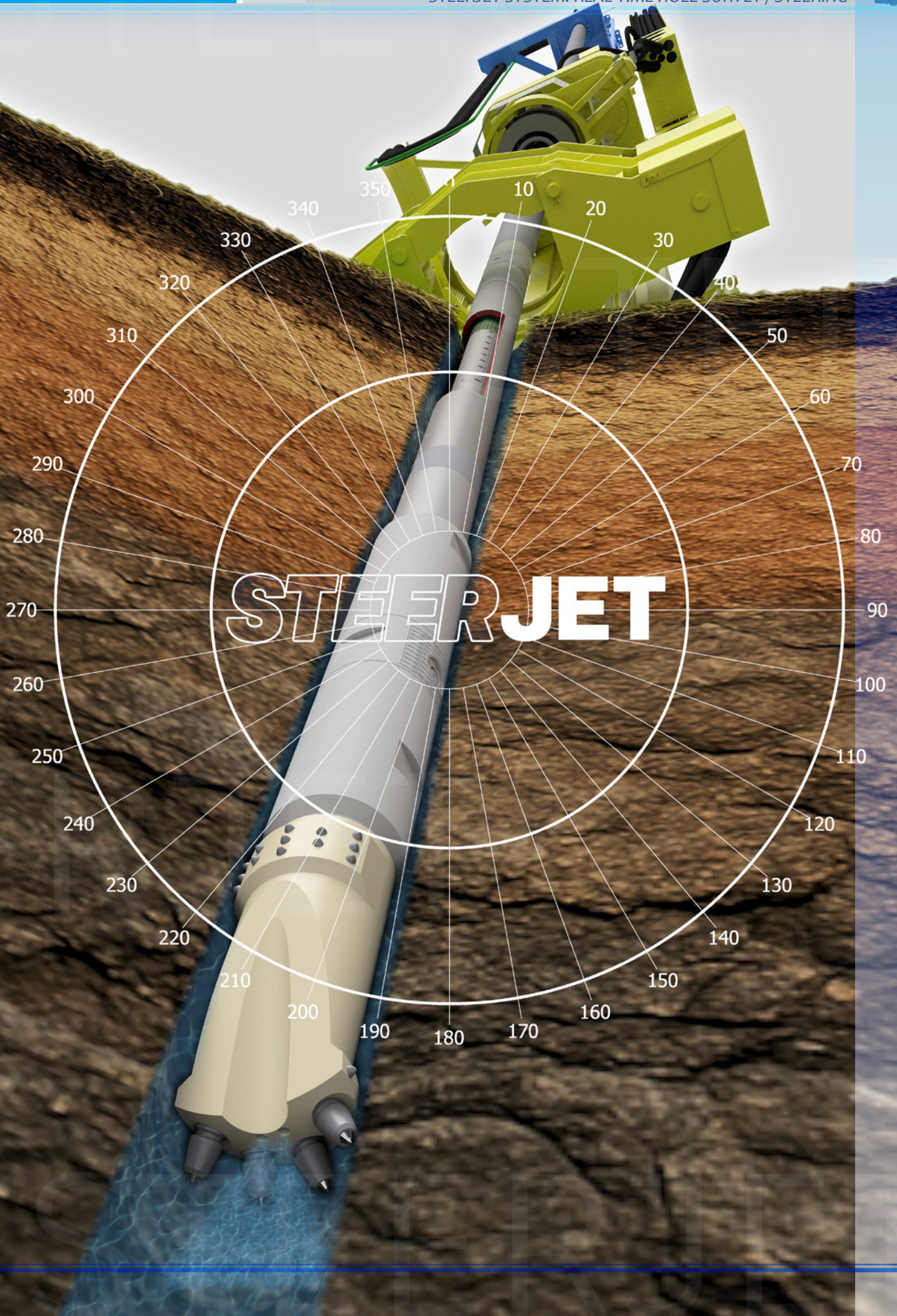
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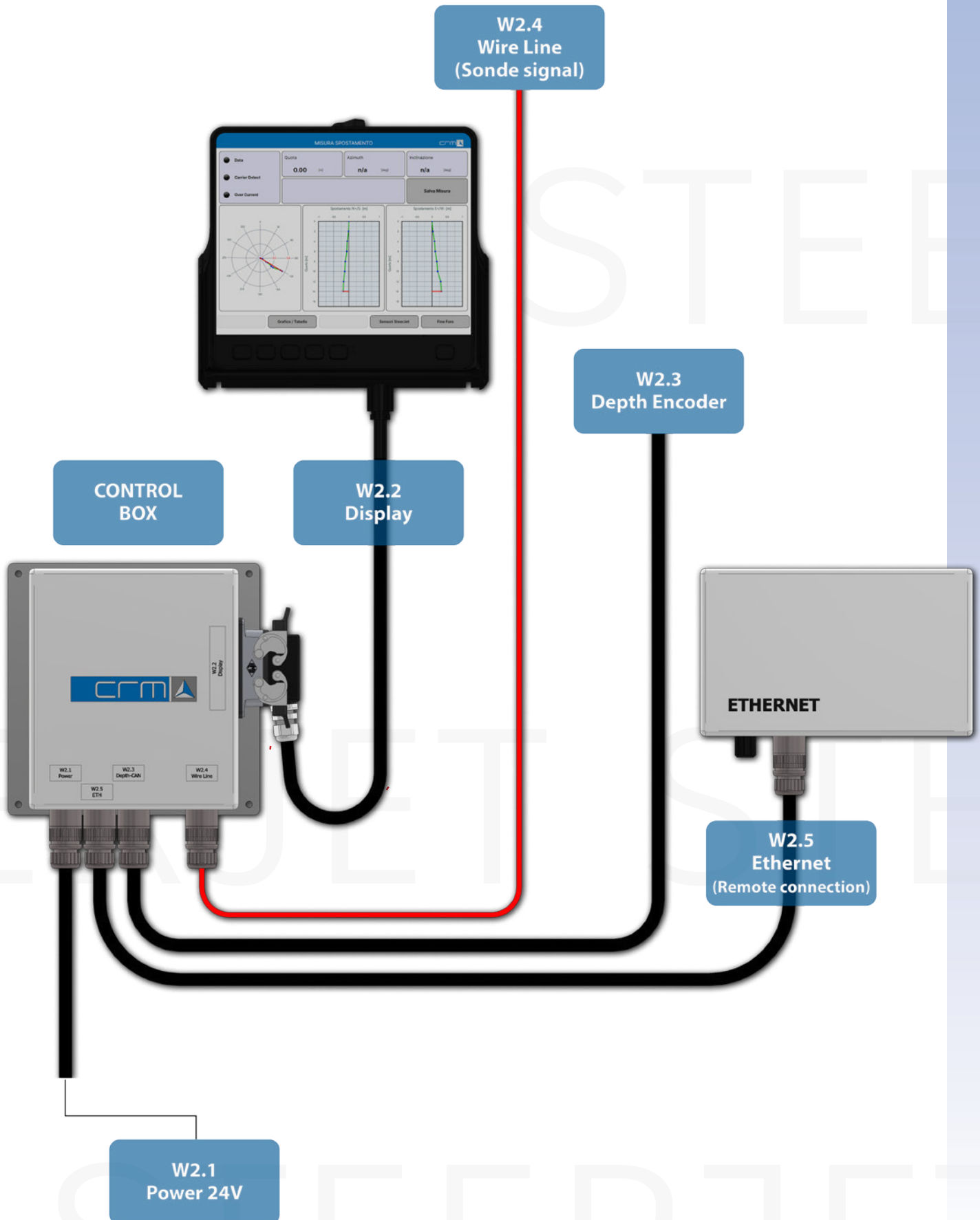


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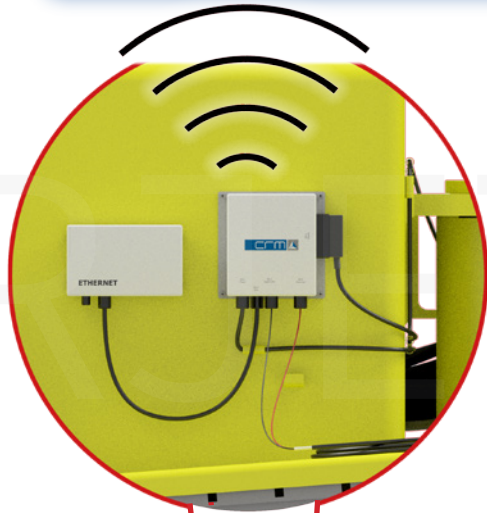




STEERJET SYSTEM COMPOSITION



**CRM SERVER:
REAL TIME
REMOTE ASSISTANCE!**



TO CONTROL BOX

MWJ ROD
CONNECTION

SONDE
HOUSING

MONITOR
ADAPTER

NOZZLES
HOLDER

DIRECTIONAL
BIT

**NO STAINLESS
STEEL !**

**NO GALLING
THREADS !**

1 STARTING MEASURES



2 SAVE THE MEASURE AT THE REQUIRED DEPTH



3 WAIT A FEW SECONDS



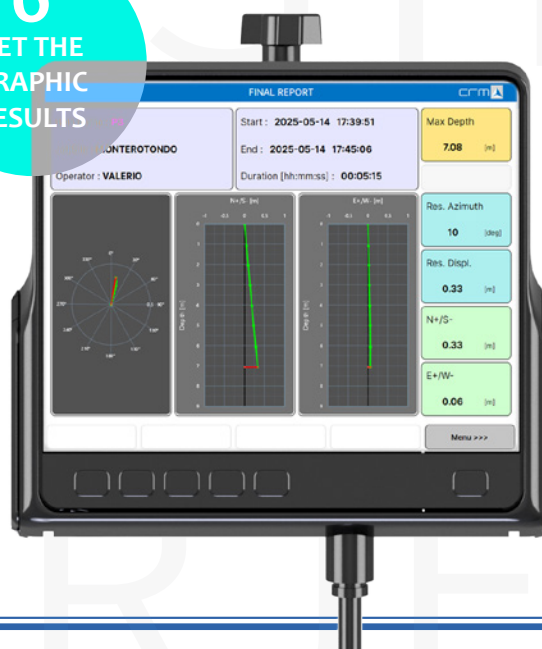
4 END HOLE STOP MEASURES

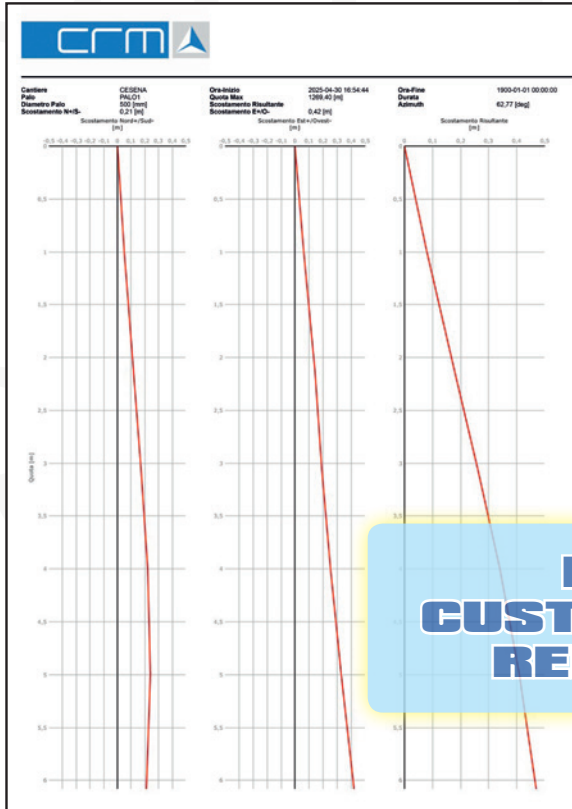


5 GET THE MEASURES REPORT



6 GET THE GRAPHIC RESULTS







Carriera
Pala
Scostamento N-S

CESENA
PM21
0.21 [m]

Ora-Inizio
Quota Max
Scostamenti Risultante
Scostamenti E-W

2025-04-30 16:54:44
1269.40 [m]
0.42 [m]

Ora-Fine
Durata
Assoluti

1900-01-01 00:00:00
42.77 [m]

Data/Ora

Quota [m]

Azimuth [deg]

Azimuth StdDev

Pitch Angolo Ind. [deg]

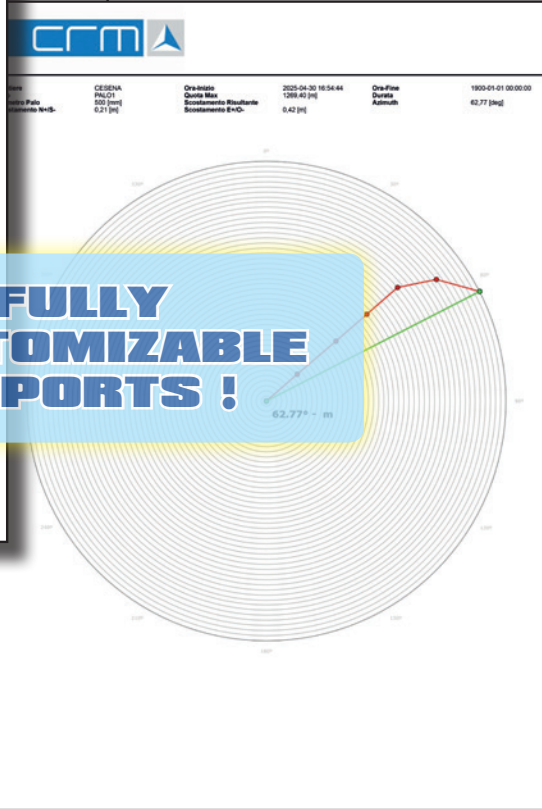
Pitch Ind. StdDev

Scostamenti N to totale N to totale E Reale [m]

Quota Risultante to Assoluti [m]

Scostamenti Assoluti

2025-04-30 16:54:44	0	0	0	0	0	0	0	0	0	
2025-04-30 16:55:03	0.99	49.1	0	4.8	0.07	0.05	0.06	0.99	49.1	0.08
2025-04-30 16:55:19	2.15	49.1	0	4.8	0.05	0.12	0.14	2.14	49.1	0.18
2025-04-30 16:55:34	3.06	49.1	0	4.8	0.06	0.17	0.19	3.05	49.1	0.26
2025-04-30 16:55:53	4.01	49.1	0	4.8	0	0.22	0.25	4	49.1	0.34
2025-04-30 16:56:19	5.01	76.6	0	4.7	0.05	0.24	0.33	5	54.4	0.41
2025-04-30 16:56:46	6.1	106.1	0	4.6	0.07	0.21	0.42	6.08	62.8	0.47



**FULLY
CUSTOMIZABLE
REPORTS !**

LOGIN TO UBIQUITY:
You can use your UBIQUITY credentials to log in.

☒ Domain/Username ☐ E-mail

Domain

Username

[or Register a new Account](#)

[CAN'T ACCESS?](#) [HELP](#)

**REMOTE
CONNECTION !**





CRM-STEERJET_25-60-001

DATA EXPORT

CRM

	Current Data	Backup Data
Recordings	1	46
Used Space [kB]	4	141
Free Space [kB]	32955580	32955580
Oldest File	03/07/2025 16:02	30/04/2025 16:57

REMOTE DATA EXPORT !

<<< Back

Export Current Data

Export Backup Data

STEERJET SPECIFICATIONS

ORIENTATION SENSOR

ANGULAR ACCURACY

AZIMUTH (LATITUDE $\pm 45^\circ$) $\pm 0.3^\circ$

INCLINATION $\pm 0.1^\circ$

TOOLFACE $\pm 0.1^\circ$

OPERATING TEMPERATURE RANGE -40°C to 125°C

SIZE (PRESSURE BARREL) 1"-3/8 (35mm) DIAMETER

15"-3/4 (400mm) LENGTH

SIZE (NAKED) 1"-1/8 (28 mm) DIAMETER

11"-1/4 (286 mm) LENGTH

WEIGHT 4,6 lbs (2,1 Kg) (PRESSURE BARREL)

0,9 lbs (0,4 Kg) (NAKED)

SHOCK 1000 g 1 ms

VIBRATION 20 G RMS 5 Hz to 1000 Hz

TOP END UNIT

OPERATING TEMPERATURE RANGE -30°C to 50°C

SIZE 4"x9"x7" (101.6x228.6x177.8 mm)

WEIGHT 2.65 lbs (1.2 Kg)

SYSTEM POWER 110 to 240 VAC (0.8 A)

50 Hz to 60 Hz

DRILLER'S DISPLAY

OPERATING TEMPERATURE RANGE -30°C to 50°C

SIZE 16"x1.5"x9" (406.4x38.1x228.6 mm)

WEIGHT 6.95 lbs (3.15 Kg)

POWER Driller's display is powered from the Top End Unit with an interconnect cable over 200 feet long.

2" TOP SWIVEL

MAX PRESSURE: 18 MPa

MIN.-MAX TEMPERATURE: -30°C; +120°C

MAX DRILLING SPEED DRY RUN: 30 RPM (MAX 2h)

MAX DRILLING SPEED WITH MEDIUM: 90 RPM

WEIGHT: 13 KG

3" TOP SWIVEL

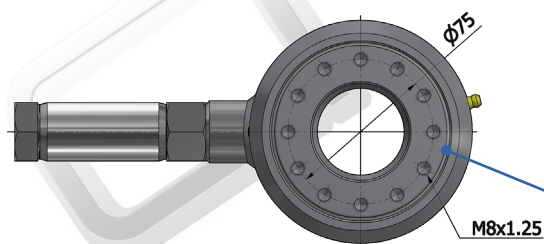
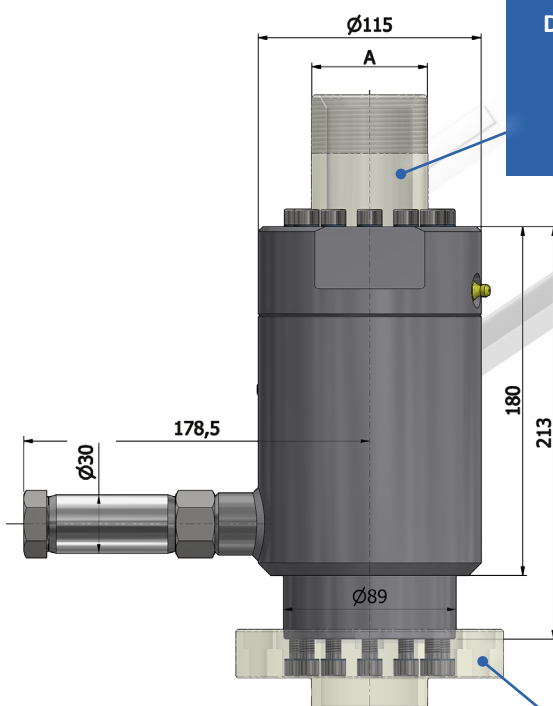
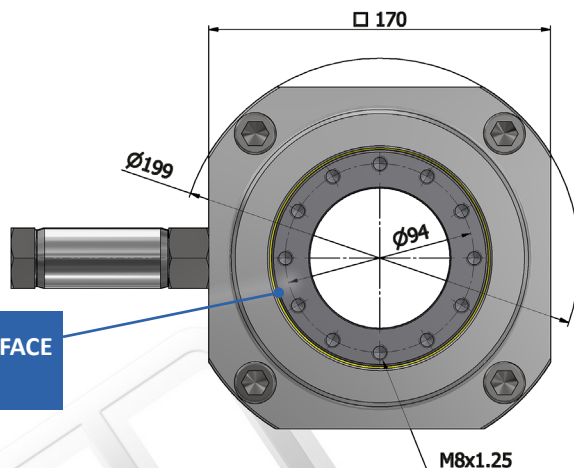
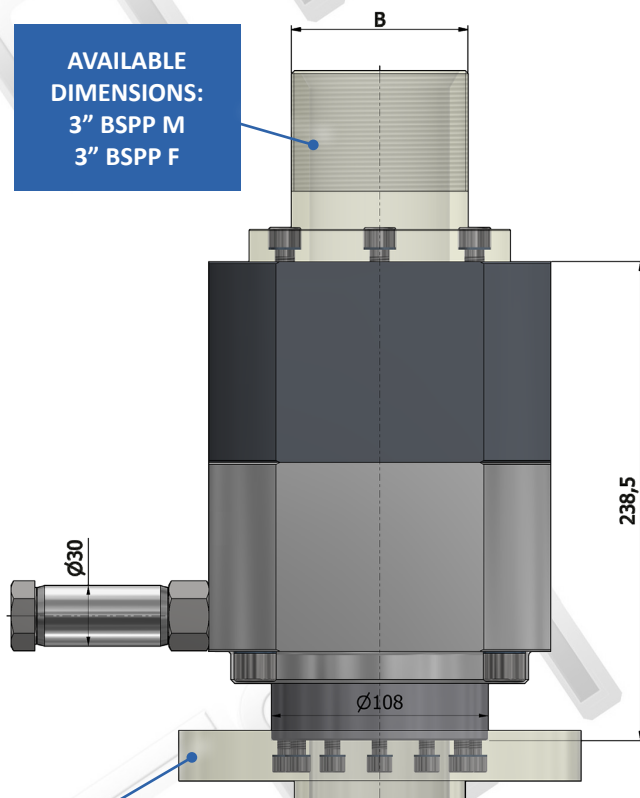
MAX PRESSURE: 18 MPa

MIN.-MAX TEMPERATURE: -30°C; +120°C

MAX DRILLING SPEED DRY RUN: 25 RPM (MAX 2h)

MAX DRILLING SPEED WITH MEDIUM: 85 RPM

WEIGHT: 28 KG

LOWER INTERFACE
DETAILAVAILABLE
DIMENSIONS:2" BSPT M
2" BSPP M
2" NPT M
2" NPT FAVAILABLE
DIMENSIONS:3" BSPP M
3" BSPP FFULLY
CUSTOMIZABLE
ADAPTER

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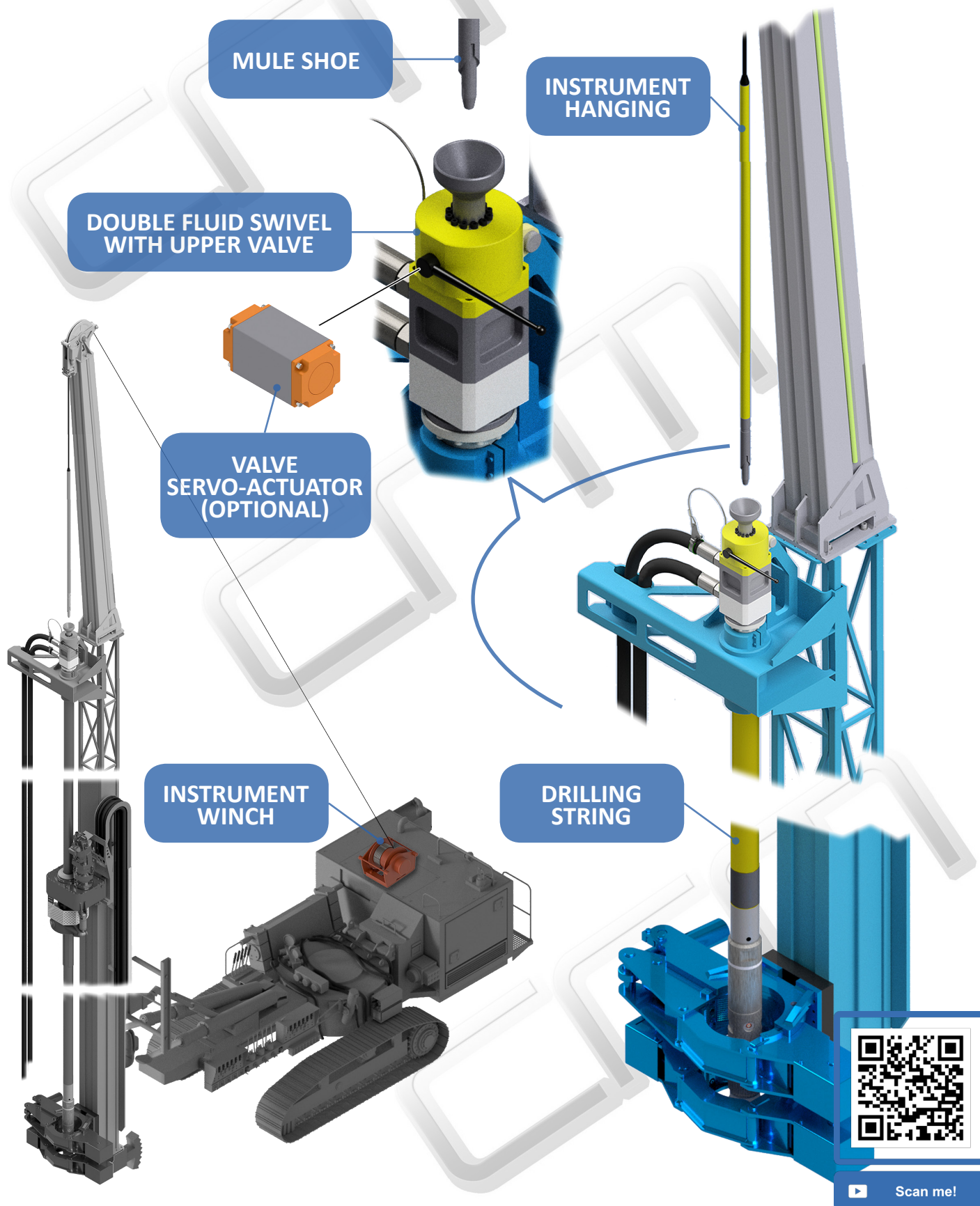
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Certificato N° IT00/0007

REAL TIME ADVANTAGES:

- DECIDING IF STOP DRILLING BECAUSE OF EXCESS OF DEVIATION OR CONTINUING DRILLING.
- CHECKING THE HOLE WITHOUT OPENING THE STRING.
- AVOIDING RODS FAILURES FOR UNEXPECTED BENDING
- CORRECT DEVIATIONS.



VERTI JET SPECIFICATIONS

EXPLORER SENSOR ACCURACY

TYPICAL POSITIONAL ACCURACY	0.24% (max 2.4 m/1000 m)
INCLINATION	±0.1°
AZIMUTH	±0.5°
ROLL	±0.5°
REPEATIBILITY	2 sigma
RATE CAPABILITY	±2000°/s

EXPLORER GYRO PROBE

DIAMETER	40 mm / 25 mm
LENGTH	700 mm / 460 mm
TYPE	WIREFLINE /BATTERY (LIVE / MEMORY)
TECHNOLOGY	MEMS (Micro Electro Mechanical System)
POWER CONSUMPTION	1.2 W
MEMORY SIZE	8 GB
COMMUNICATIONS	SERIAL RS-485 / PLC
BATTERY TYPE	RECHARGEABLE NiMH
BATTERY CHARGE LIFETIME	8 HOURS

EXPLORER USEFUL DATA

COMPUTER	ALGIZ 10 RUGGED TABLET PC (MIL-STD-810G)
COMPUTER OS	WINDOWS 10
SOFTWARE	WASSARA NAVIGATOR™ (FOR SURVEYING, QC, REPORTS)
RUNNING GEAR	BUILT-IN 200 BAR PRESSURE RATED
CONTROL UNIT	LKAB WASSARA SURVEY WINCH CONTROLLER MKII



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Azienda Certificata
ISO 9001 / UNI EN ISO 9001:2008
Certificato N° IT00/0007