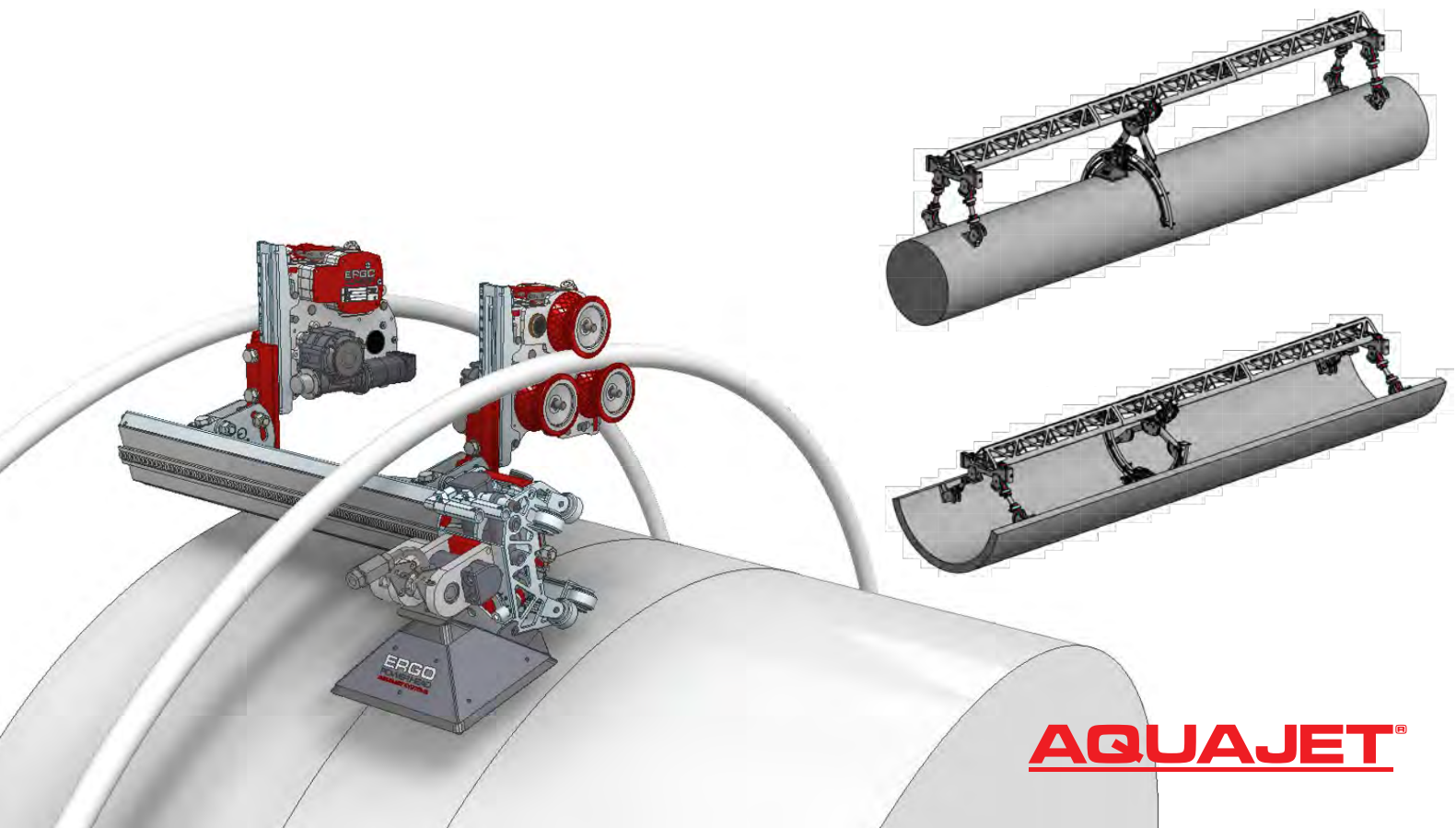




Aqua Rail Systems 3.0

EXPANDS HYDRODEMOLITION REACH AND FLEXIBILITY

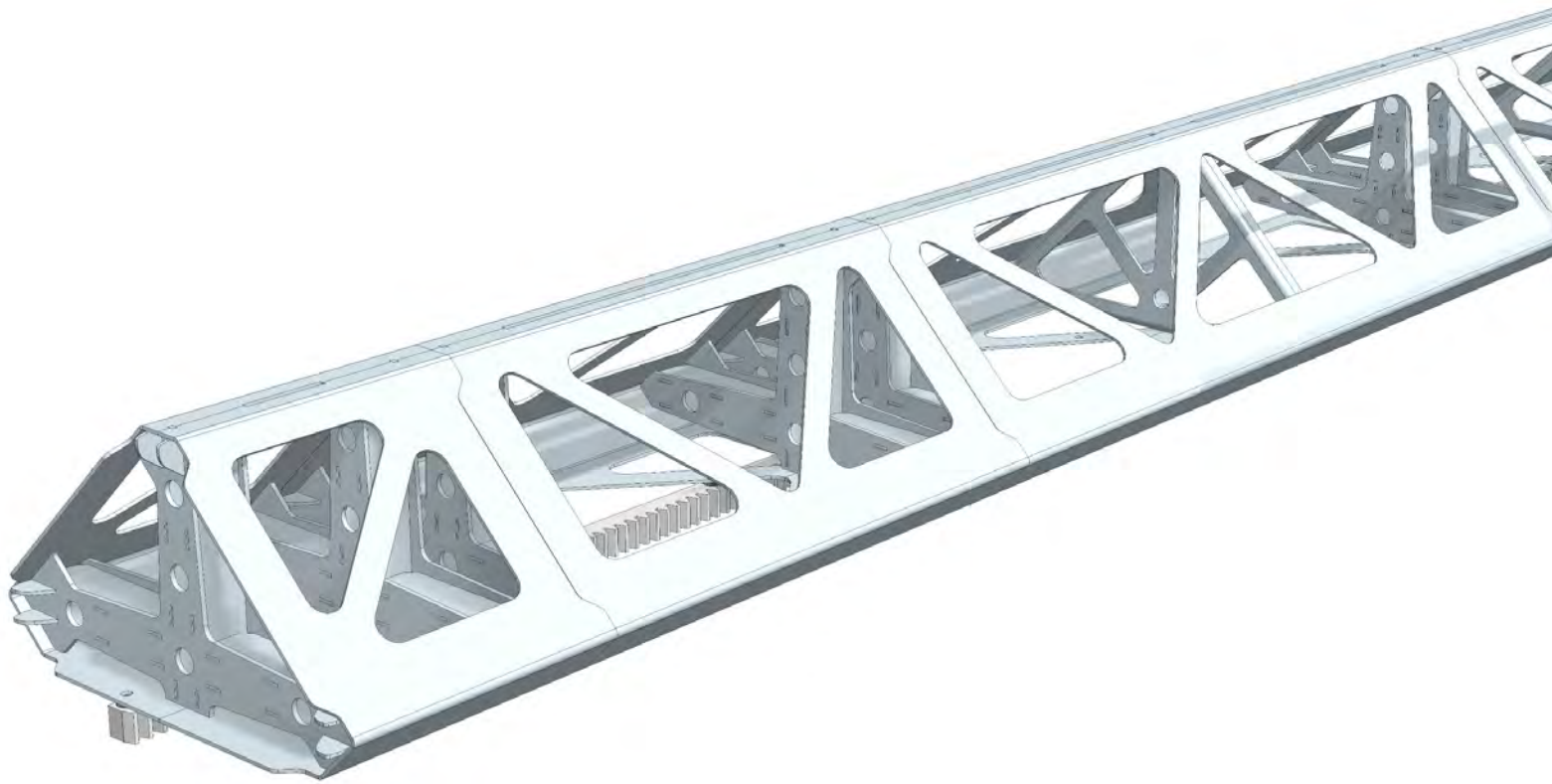


AQUAJET®

Aquajet Systems AB
Brunnsvägen 15
SE-574 53 Holsbybrunn, Sweden
+46 (0) 383-508 01
aquajet@aquajet.se
www.aquajet.se



AQUAJET[®]



Introducing

Aqua Rail Systems 3.0

– EXPANDS HYDRODEMOLITION REACH AND FLEXIBILITY

The Aqua Rail Systems 3.0 represents the next generation of hydrodemolition solutions, designed to revolutionize how you approach demanding projects. Combining cutting-edge innovations like the Aqua Spine 3.0 and Ergo Climber 3.0, this system offers unparalleled versatility, precision, and efficiency.

Aqua Rail Systems 3.0 is engineered to meet the evolving needs of our customers, delivering advanced tools that adapt to a wide range of applications. Whether it's tackling vertical or overhead surfaces, irregular geometries, or hard-to-reach areas, this system provides a robust, flexible, and safe solution for every challenge.

With enhanced automation, greater durability, and user-focused improvements, Aqua Rail Systems 3.0 is designed to save time, reduce costs, and maximize

productivity. Our goal is to empower you to achieve superior results with less effort, ensuring you stay ahead in a competitive industry.

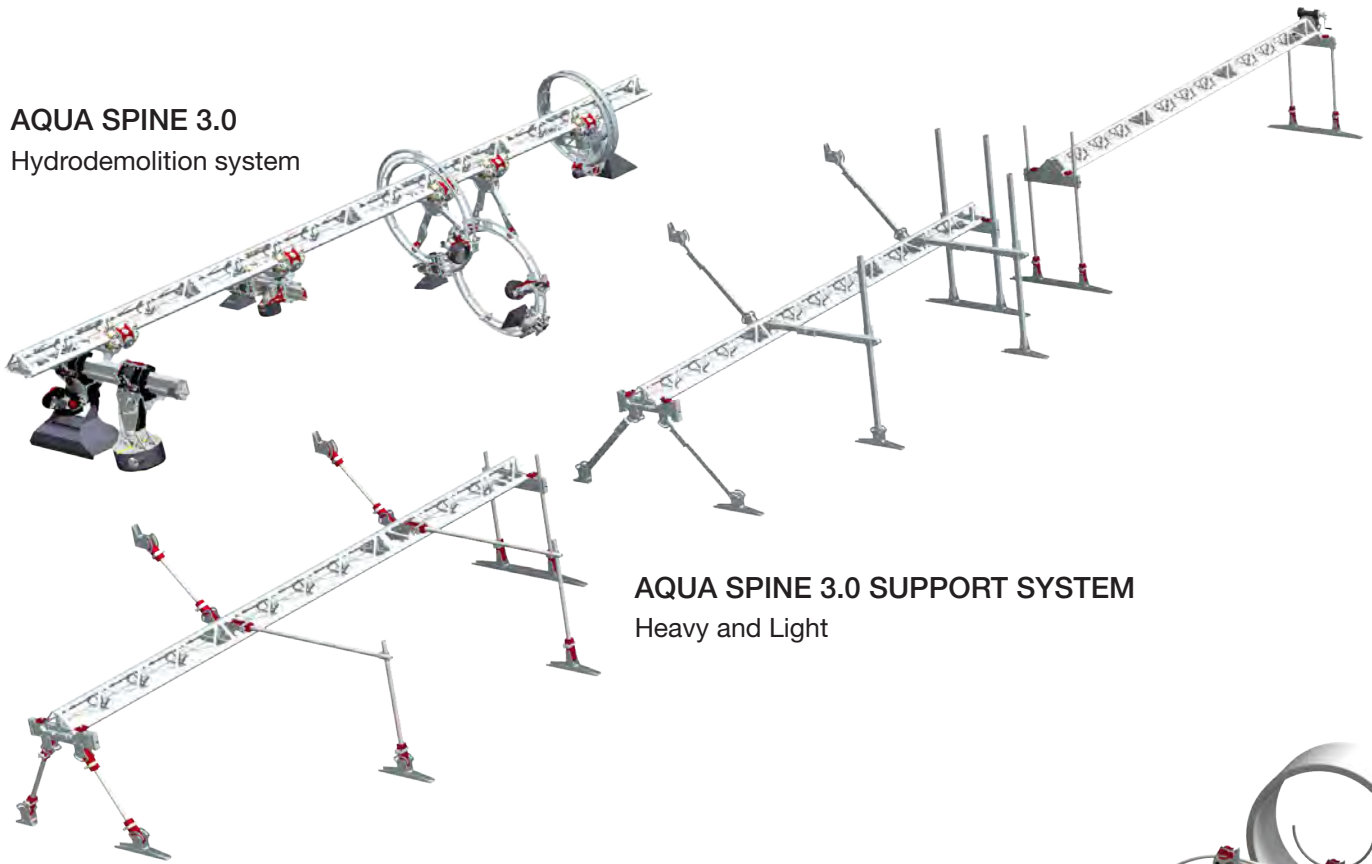
This new system isn't just about technology—it's about giving you the tools to work smarter, faster, and safer. This multi-modular system is the future of hydrodemolition, built to deliver the results you need today and the reliability you'll rely on tomorrow.

Aqua Rail Systems 3.0

AQUA SPINE 3.0 / ERGO CLIMBER 3.0 / SUPPORT SYSTEMS 3.0

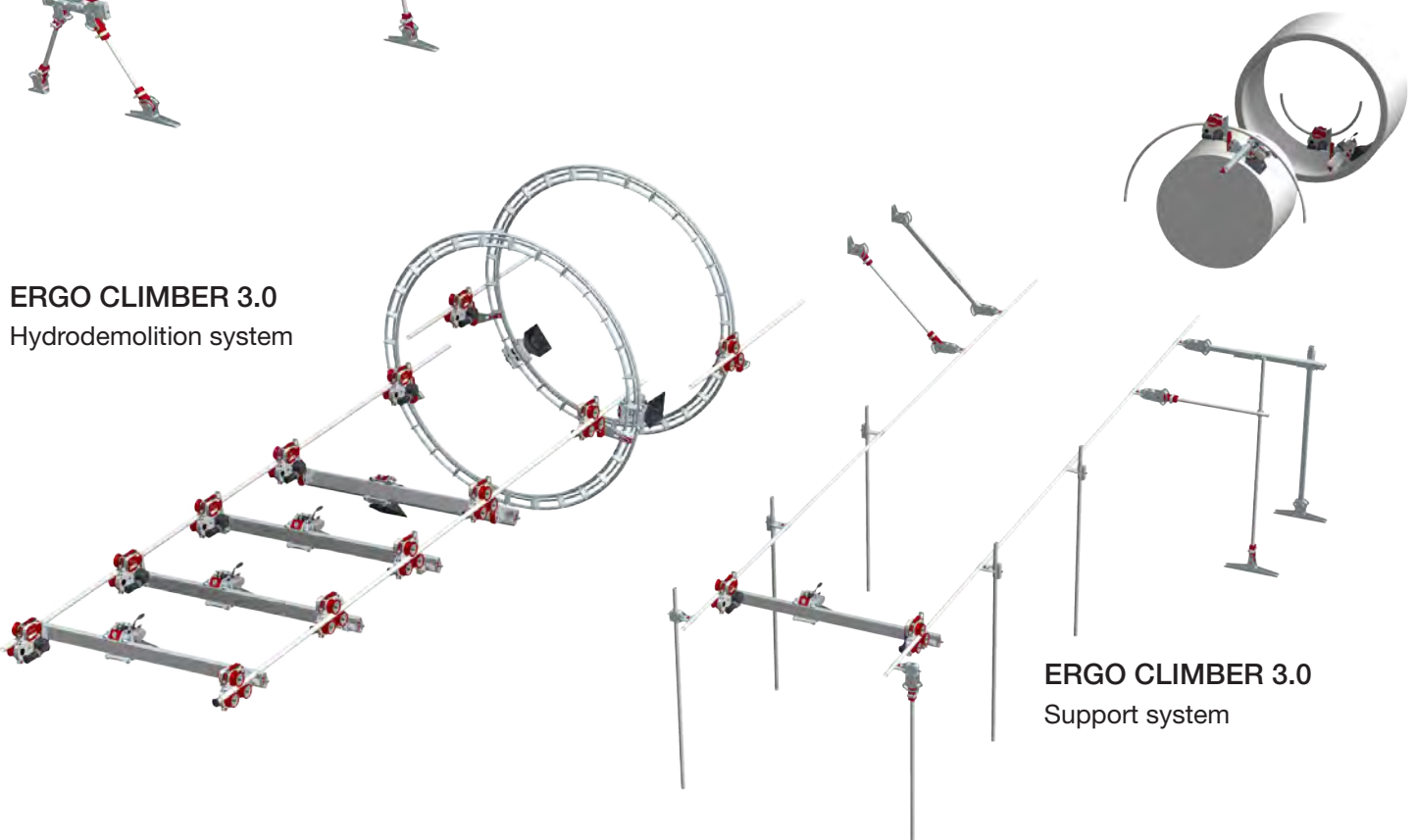
The Aqua Rail Systems 3.0 is a complete solution and includes several new and improved products - such as the Aqua Spine 3.0, Ergo climber 3.0 and the Support system that support the rail systems in all imaginable situations.

AQUA SPINE 3.0
Hydrodemolition system



AQUA SPINE 3.0 SUPPORT SYSTEM
Heavy and Light

ERGO CLIMBER 3.0
Hydrodemolition system



ERGO CLIMBER 3.0
Support system

Compatibility

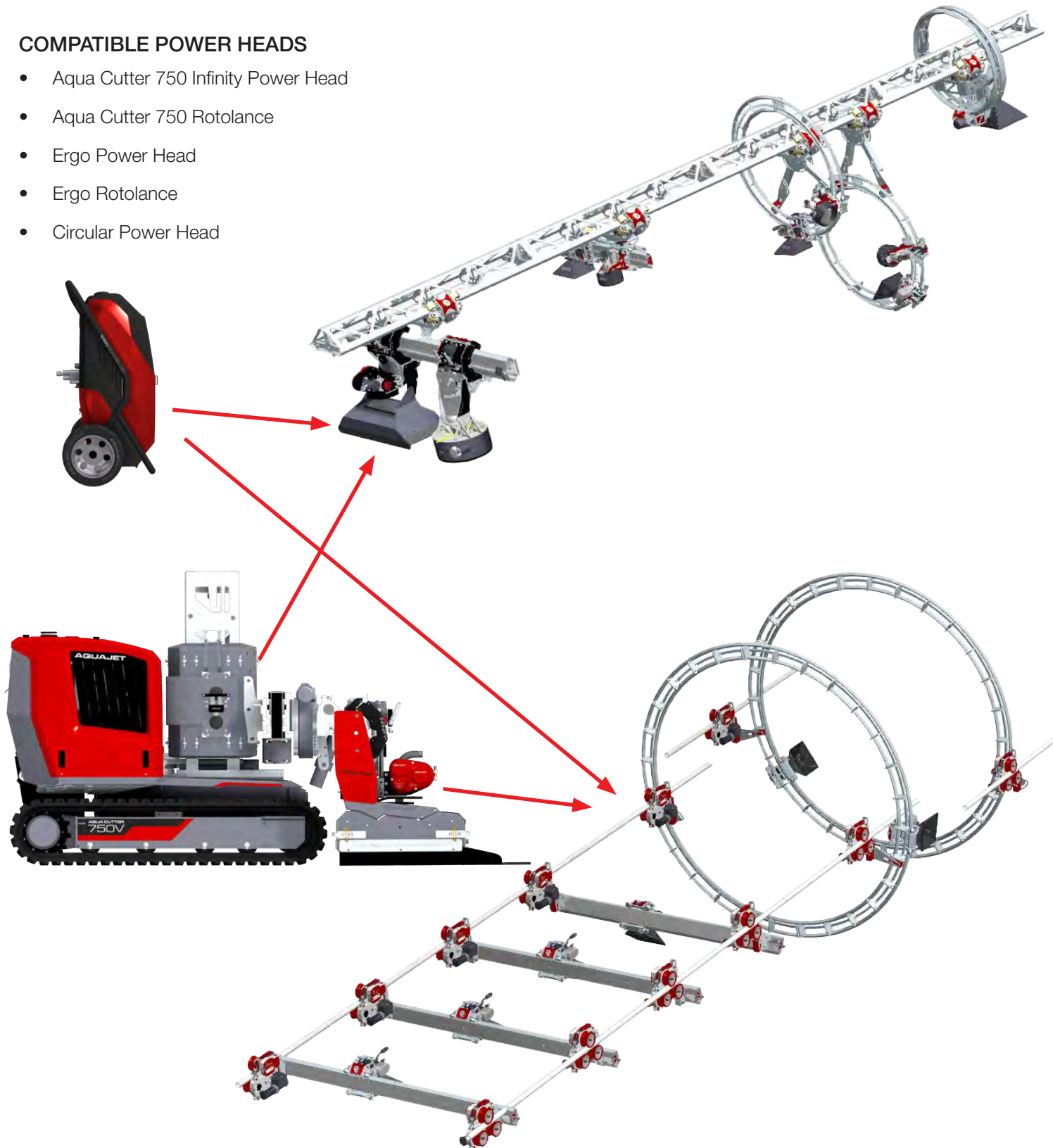
EVOLUTION 3.0 CONTROL SYSTEM

COMPATIBLE CONTROL UNITS

- Aqua Cutter 750
- Ergo Controller

COMPATIBLE POWER HEADS

- Aqua Cutter 750 Infinity Power Head
- Aqua Cutter 750 Rotolance
- Ergo Power Head
- Ergo Rotolance
- Circular Power Head



Aqua Spine 3.0

RAIL SYSTEM

RAIL INFORMATION

Lightweight design

The weight has been reduced from 52 kg (115 lbs) to 39 kg (86 lbs) for a 2-meter Aqua Spine rail section.

- 2,0 m (6,6 ft) = 39 kg (86 lbs)
- 1,0 m (3,3 ft) = 22 kg (48.5 lbs)
- 0,5 m (1,6 ft) = 14 kg (31 lbs)
- 0,25 m (0,8 ft) = 10 kg (22 lbs)

Enhanced performance

Improved strength with approximately 60% better load capacity and 50% better torque resistance.

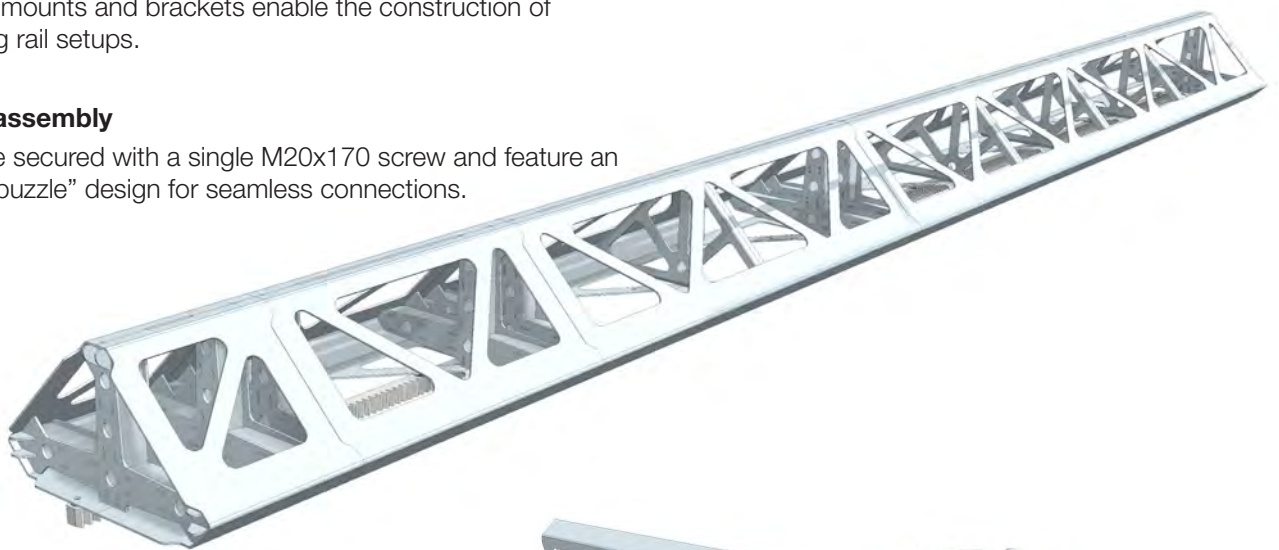
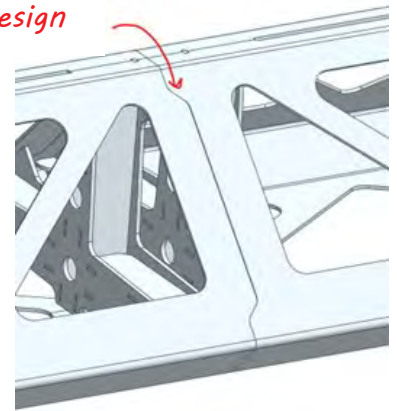
Modular and scalable

Traversable mounts and brackets enable the construction of infinitely long rail setups.

Effortless assembly

Sections are secured with a single M20x170 screw and feature an innovative “puzzle” design for seamless connections.

Puzzle design



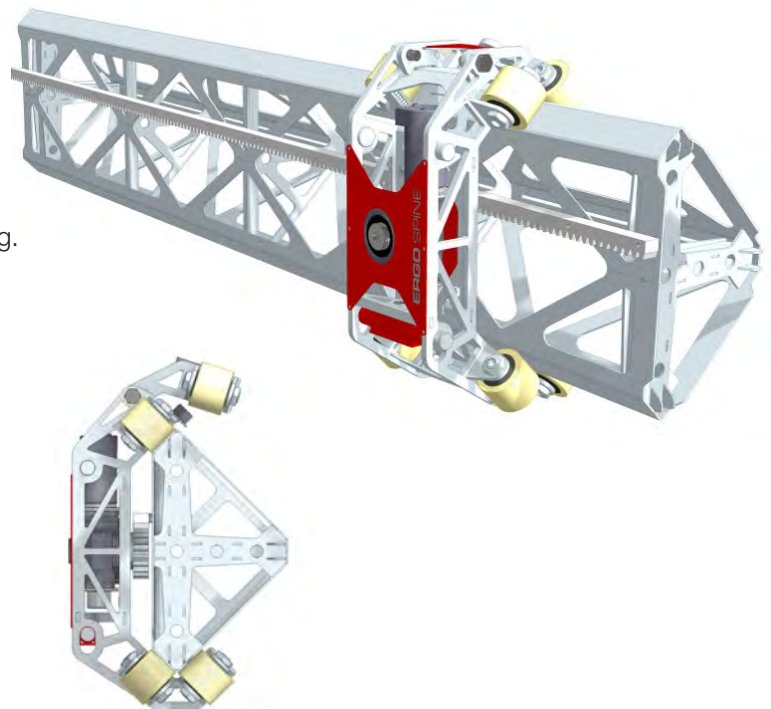
HOIST INFORMATION

Reduced weight

Weight reduced from 46 kg to 28 kg for improved handling.

Quick attachment

- Easily attaches to the rail with minimal effort.
- Features fast and easy tool attachment capabilities.



Aqua Spine 3.0

HYDRODEMOLITION SYSTEM

BRACKETS FOR ROLLER BEAMS

Designed to securely attach the roller beam to the Aqua Spine system.

Aqua Cutter 750V Roller Beam

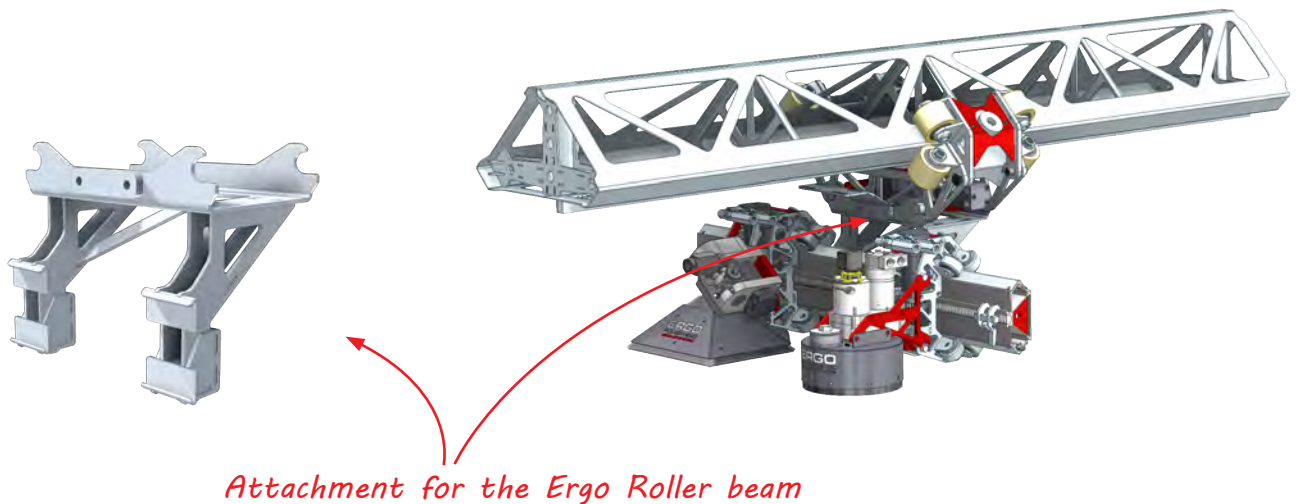
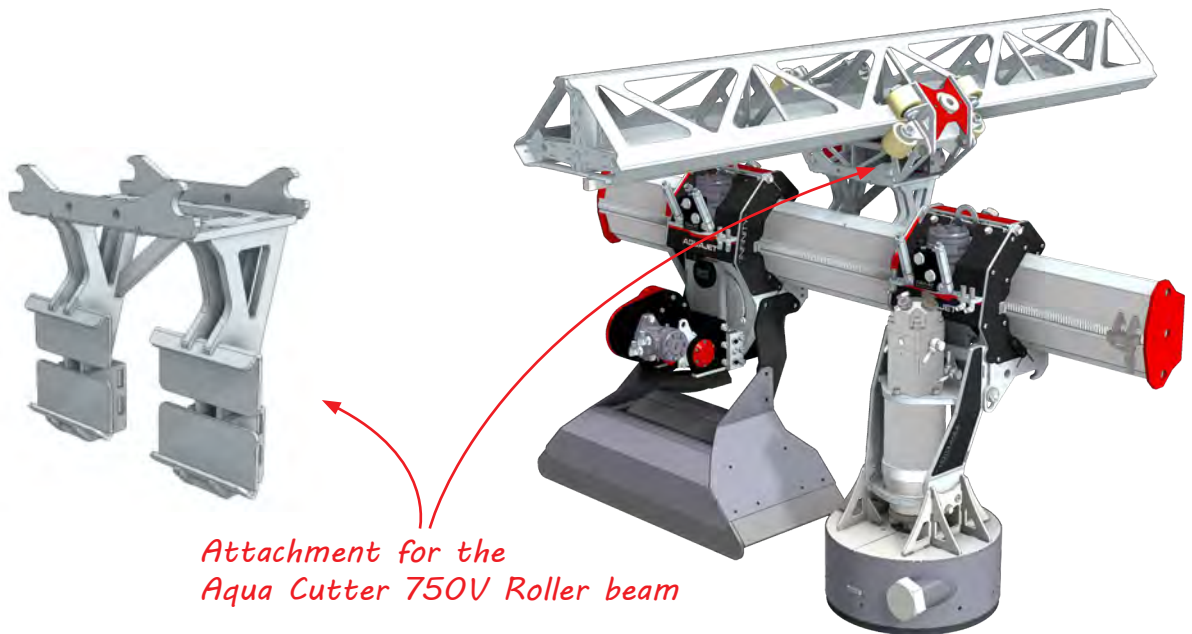
Supports reaction forces up to 2000N.

Ergo Roller Beam

Handles reaction forces up to 1000N.

Curved Roller Beam

Compatible with the Aqua Cutter 750V.



Aqua Spine 3.0

HYDRODEMOLITION SYSTEM

RINGS / RADIUSES UP TO 2000N

Designed for work in tunnels or on pillars, easily attached to the Aqua Spine system.

Aqua Centralizer

Designed for pipe and tunnel systems.

- $\varnothing 1,0$ m (3,3 ft) ring = $\varnothing 1,5$ -2,0 m (4,9-6,5 ft)
- $\varnothing 1,5$ m (4,9 ft) ring = $\varnothing 1,9$ -2,5 m (6,2-8,2 ft)
- $\varnothing 2,0$ m (6,5 ft) ring = $\varnothing 2,4$ -3,0m (7.9-9,8 ft)

Aqua Spine Circular Power Head

Designed for work on pillars and columns.

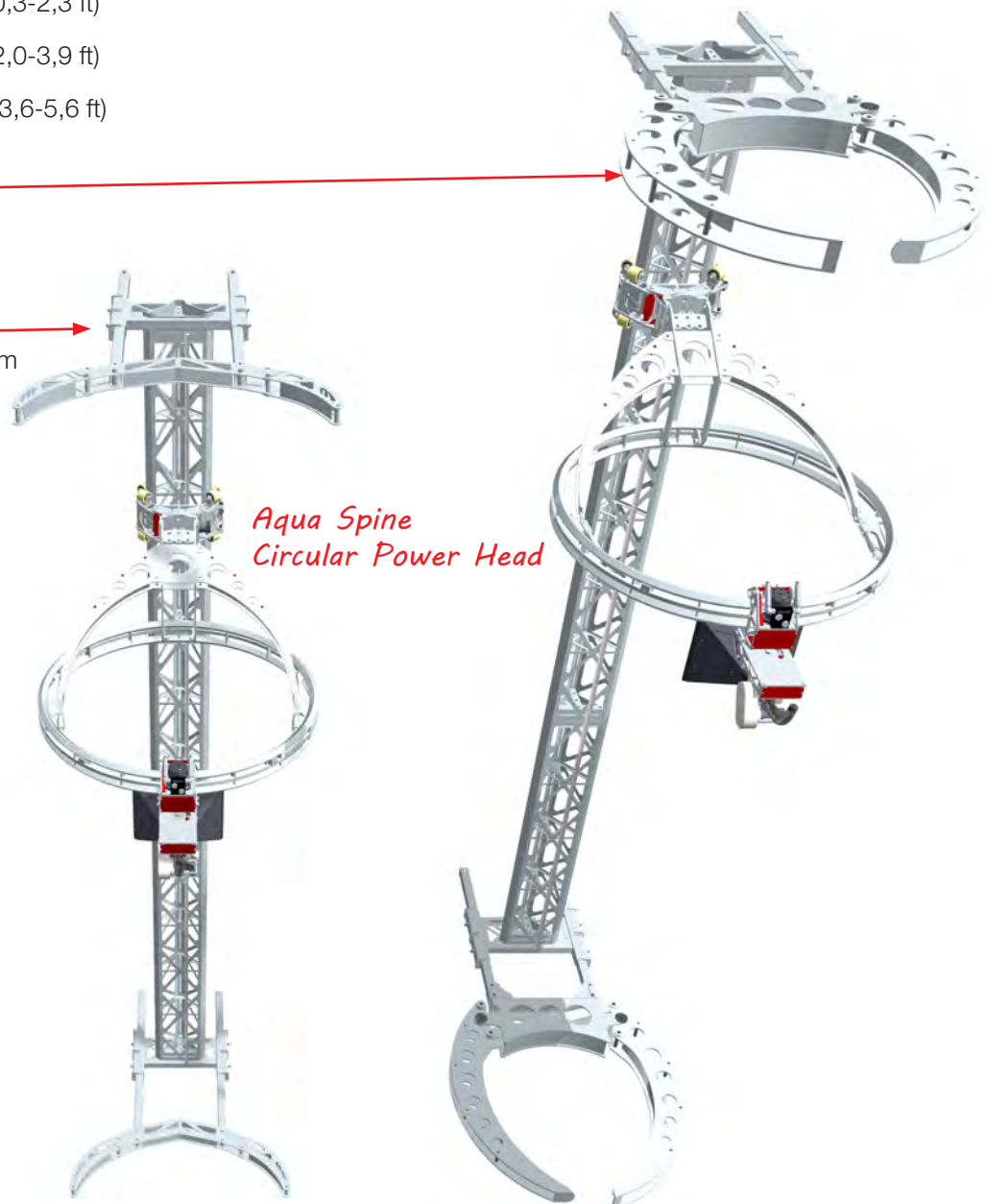
- $\varnothing 1,0$ m (3,3 ft) ring = $\varnothing 0,1$ -0,7 m (0,3-2,3 ft)
- $\varnothing 1,5$ m (4,9 ft) ring = $\varnothing 0,6$ -1,2 m (2,0-3,9 ft)
- $\varnothing 2,0$ m (6,5 ft) ring = $\varnothing 1,1$ -1,7 m (3,6-5,6 ft)

Hydraulic Pillar Clamp

Designed to securely anchor the system around pillars or columns.

Manual Pillar Clamp

Designed to securely anchor the system around pillars or columns.



Aqua Spine 3.0

HYDRODEMOLITION SYSTEM

RINGS / RADIUSSES UP TO 1000N

Designed for work in tunnels or on pillars, easily attached to the Aqua Spine system.

- Custom-built with selectable radius and arc length.
- Combinable mount for both internal/external work on curved surfaces, with CC 80mm standard holes.

Ergo Power Head / Ergo Rotolance

For hydrodemolition and surface preparation on curved surface.

Ergo Centralizer

Designed for pipe and tunnel systems.

Working diameter:

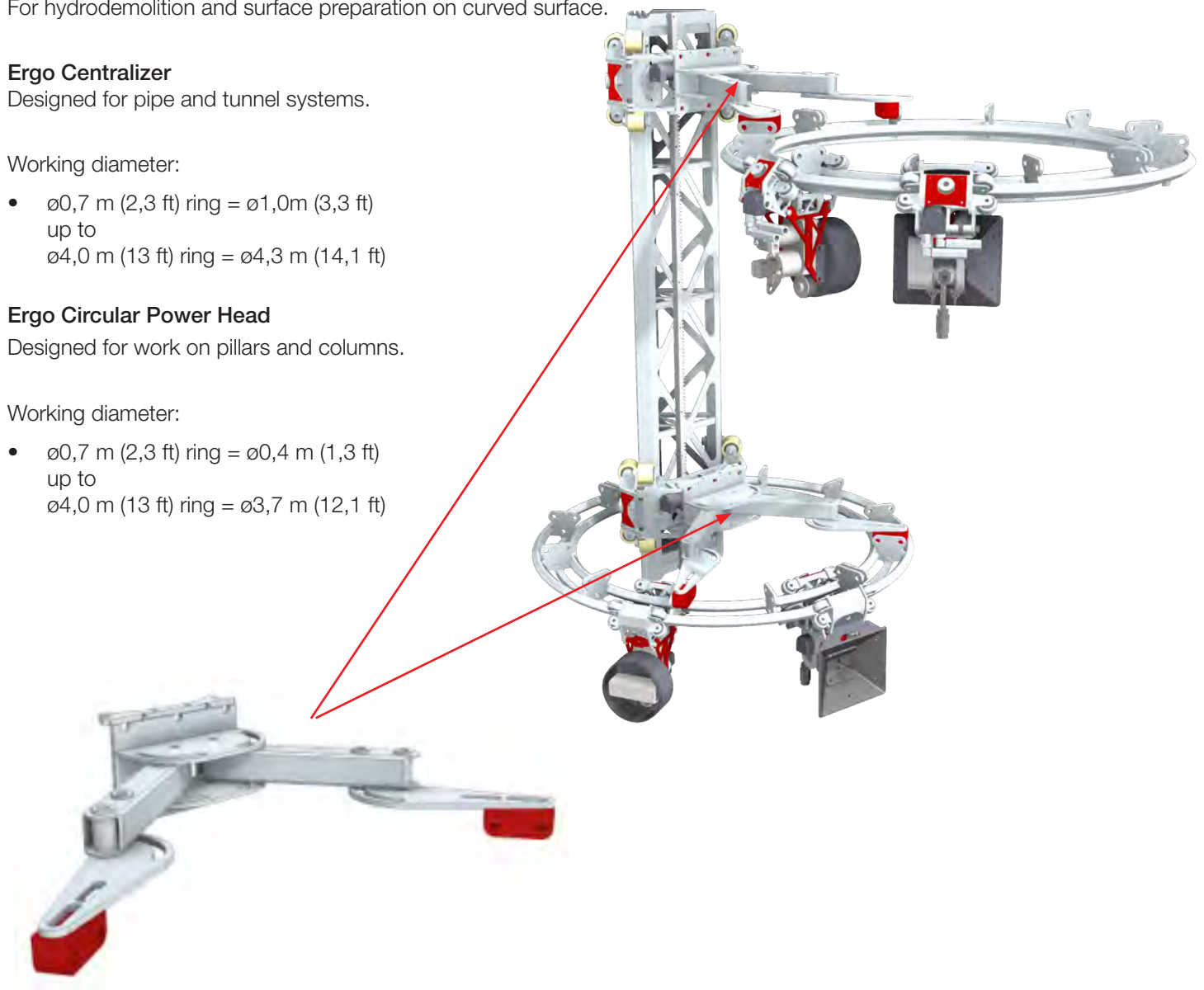
- $\varnothing 0,7$ m (2,3 ft) ring = $\varnothing 1,0$ m (3,3 ft)
up to
 $\varnothing 4,0$ m (13 ft) ring = $\varnothing 4,3$ m (14,1 ft)

Ergo Circular Power Head

Designed for work on pillars and columns.

Working diameter:

- $\varnothing 0,7$ m (2,3 ft) ring = $\varnothing 0,4$ m (1,3 ft)
up to
 $\varnothing 4,0$ m (13 ft) ring = $\varnothing 3,7$ m (12,1 ft)



Aqua Spine 3.0

SUPPORT SYSTEM

Aquajet's new Support System is designed to deliver even more flexibility and stability when working with the Aqua Spine 3.0 or the Ergo, offering a customizable solution that adapts to the specific demands of each job.

The system consists of support legs, brackets and joints that are easily adjustable in both height and angle, and can be assembled to allow the Aqua Spine to rotate 360 degrees — either manually or hydraulically. The Support System uses interchangeable CC80 hole pattern and M16 screws, enabling quick reconfiguration from one project to the next.

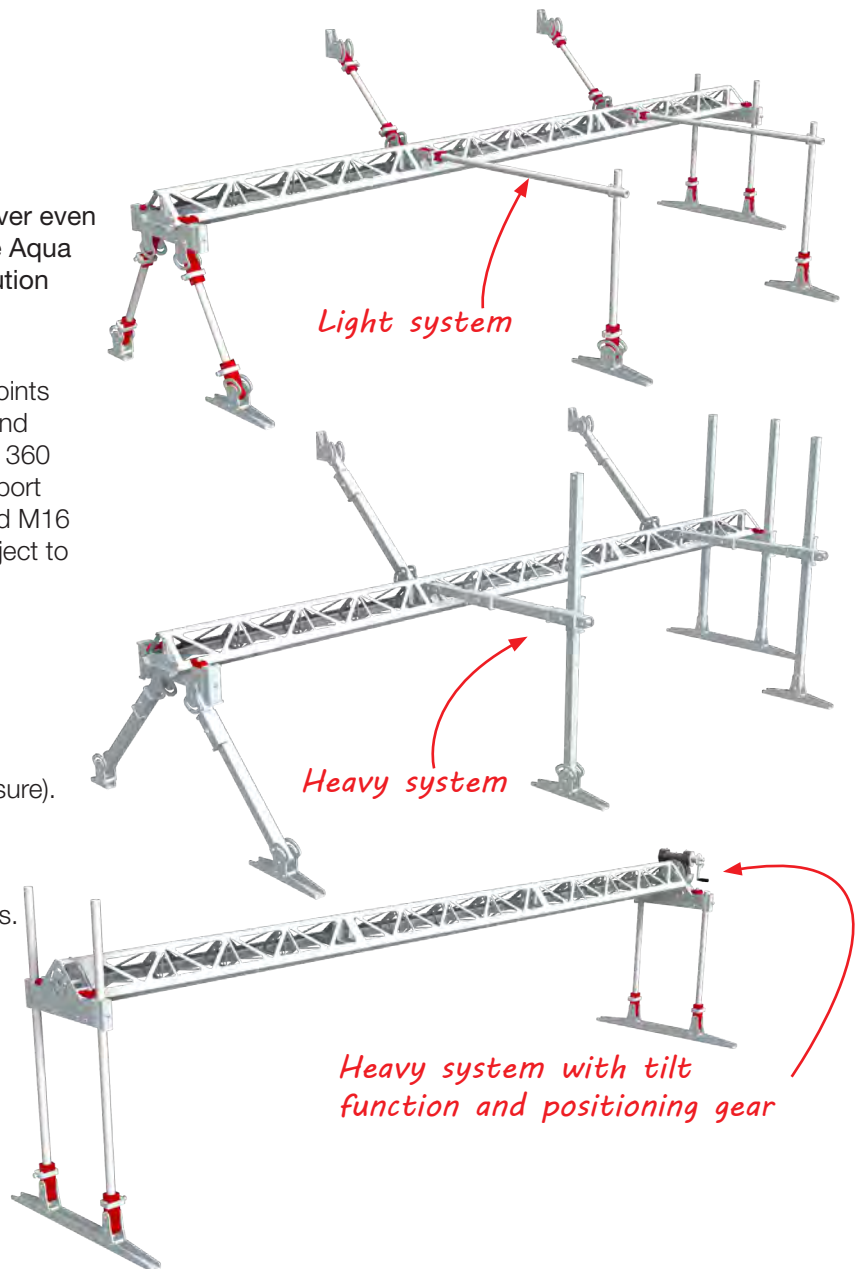
Support System Light

- Standard scaffolding pipes, $\varnothing 48$ mm.
- Suitable for both Ergo and UHP (ultra high-pressure).

Support System Heavy

- Suitable for high-pressure pumps and big setups.
- Comes in a version that includes a tilt function with positioning gear.

Both systems can be combined.



SUPPORT LEG SYSTEM

- Standard CC 80 mm holes.
- M16x100 screws.
- Only 9 parts! (Light system)

Gable mount Heavy



Gable mount Light



Support legs Heavy



Adapter plates



Cross mount Heavy



Support legs Light



Feets



Center mount Light



Center mount Heavy



Tilt mount

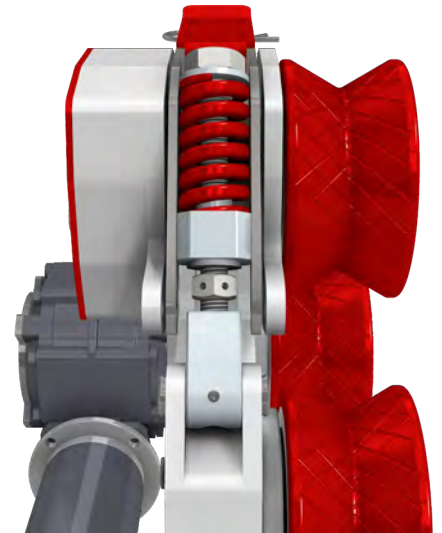


Ergo Climber 3.0

HYDRODEMOLITION SYSTEM

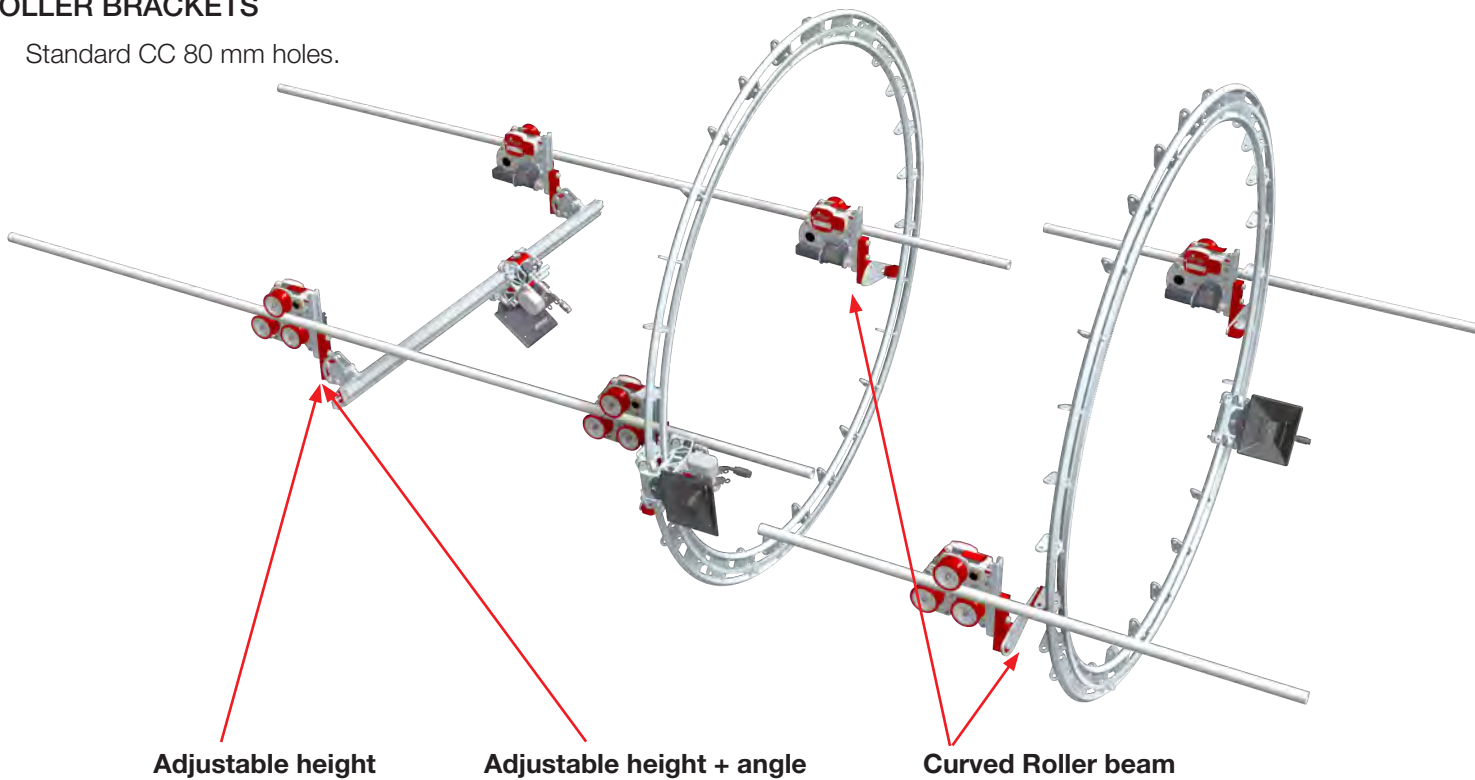
NEW TENSION SCREW

- Handles curved scaffold tubes down to a radius of 300 mm.
- Handles pipe diameter 45-55 mm.
- Fixed clamping dimension 60 mm.



ROLLER BRACKETS

- Standard CC 80 mm holes.



Adjustable height

Adjustable height + angle

Curved Roller beam

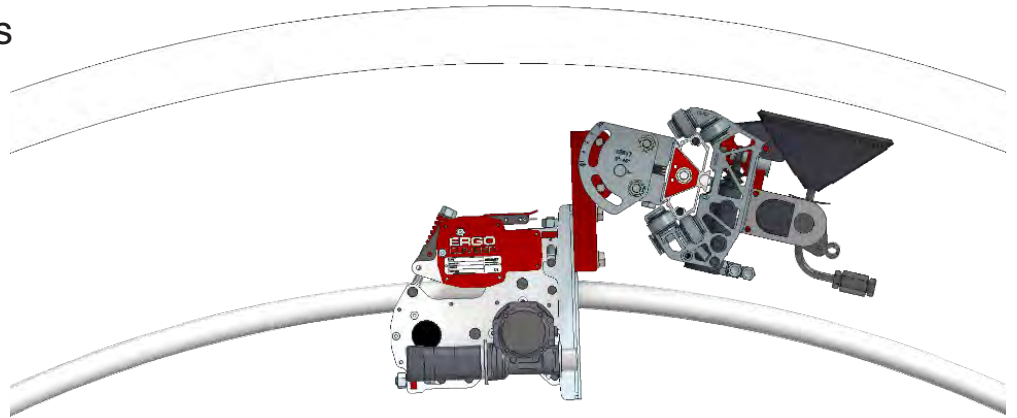


Ergo Climber 3.0

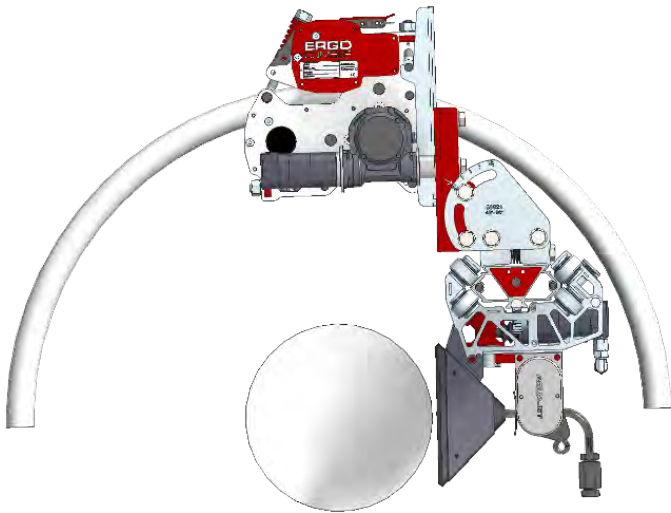
HYDRODEMOLITION SYSTEM

CURVED SCAFFOLDING PIPES

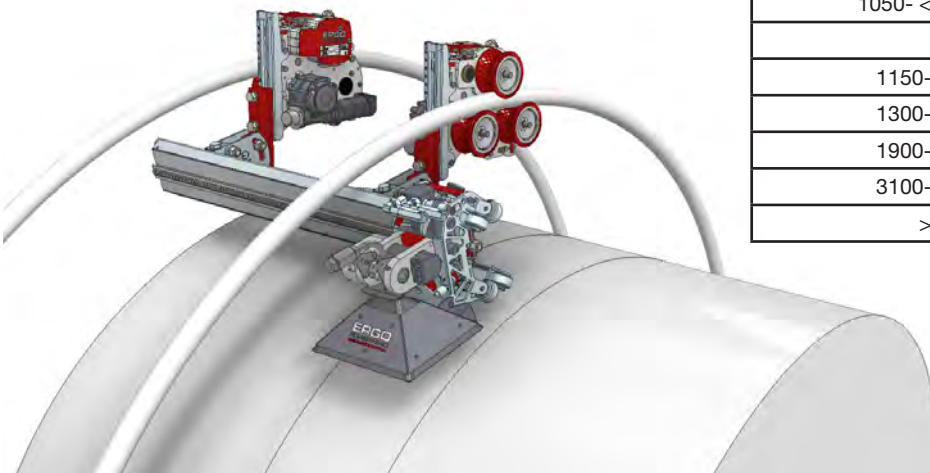
- Tunnels down to $\varnothing 1500$ mm.
- Pillars down to $\varnothing 320$ mm.



Tunnel diameter (mm)	Angle of protractor	Height adjustment (mm)
1460-1750	45°	330-425
1750-2500	30°-45°	330-335
2500-3700	20°-30°	330-335
3700-7100	10°-20°	330-335
> 7100	0°-10°	330-335

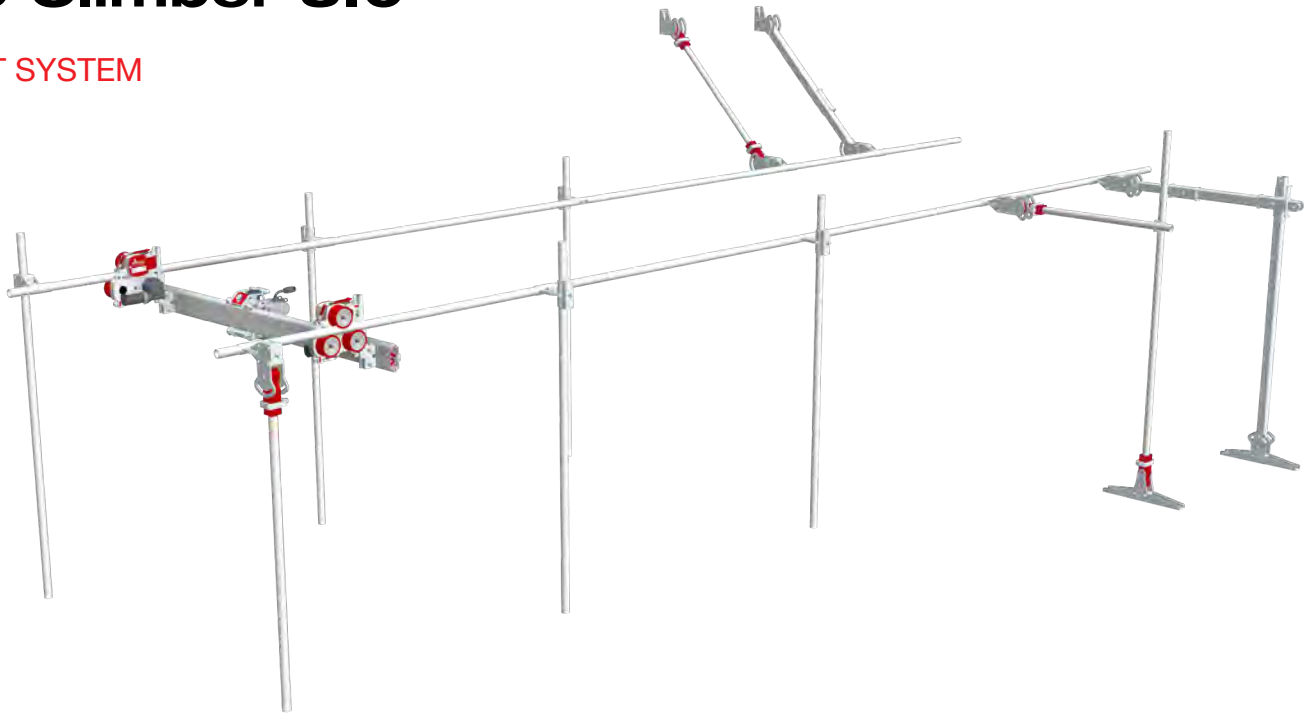


Pillar diameter (mm)	Angle of protractor	Height adjustment (mm)
320-450	80°-90°	365-375
450-600	70°-80°	375-385
600-800	60°-70°	385-390
800-1050	50°-60°	390-395
1050- <1150	45°-50°	395-400
*	*	*
1150-1300	40°-45°	380-385
1300-1900	30°-40°	385-390
1900-3100	20°-30°	390-395
3100-6500	10°-20°	390-395
>6500	0°-10°	390-395



Ergo Climber 3.0

SUPPORT SYSTEM



TRAVERSABLE MOUNTS

Mounts that allow the Ergo Climbers to pass over without hindrance.

- Supplement to standard mounts.
- Possibility to build an infinitely long frame.

Internal clamp attachment



External clamp



External multi bracket CC 80

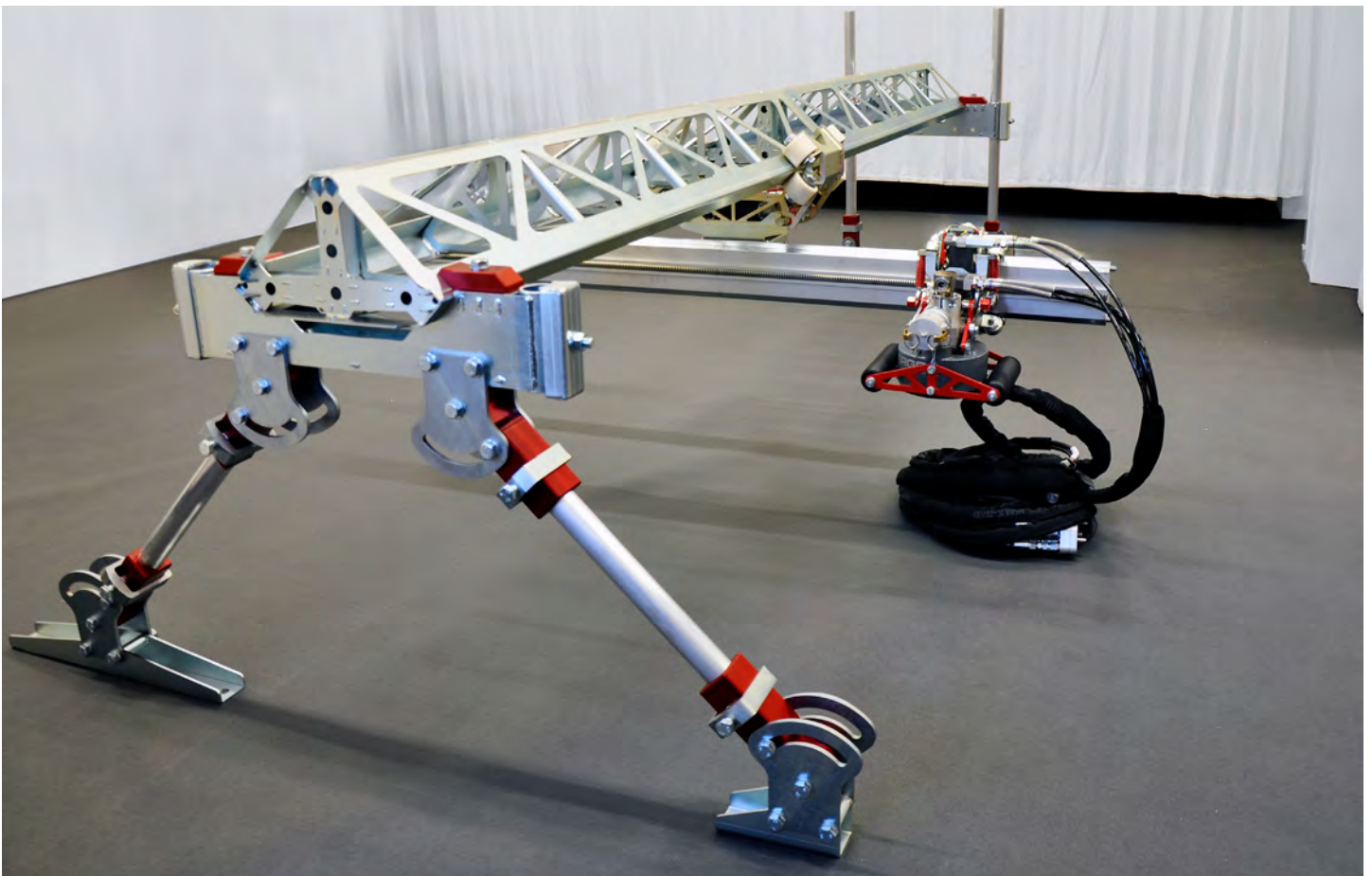


The Multi bracket is compatible with the rest of the Support System.





The heavy version of the Support System features parts that can handle greater reaction force, perfect for setups with the Aqua Cutter 750V. The system makes different configurations possible, perfect for special projects that require creative problem solving.



The new Aqua Spine 3.0 with the Light version of the Support system, perfect for work with the Ergo Power head. The support legs are light, adjustable and easily attached to any surface.



For circular Hydrodemolition, such as pillars and tunnels, the Aqua Spine 3.0 with Support System and a curved roller beam makes usually challenging applications seamless.

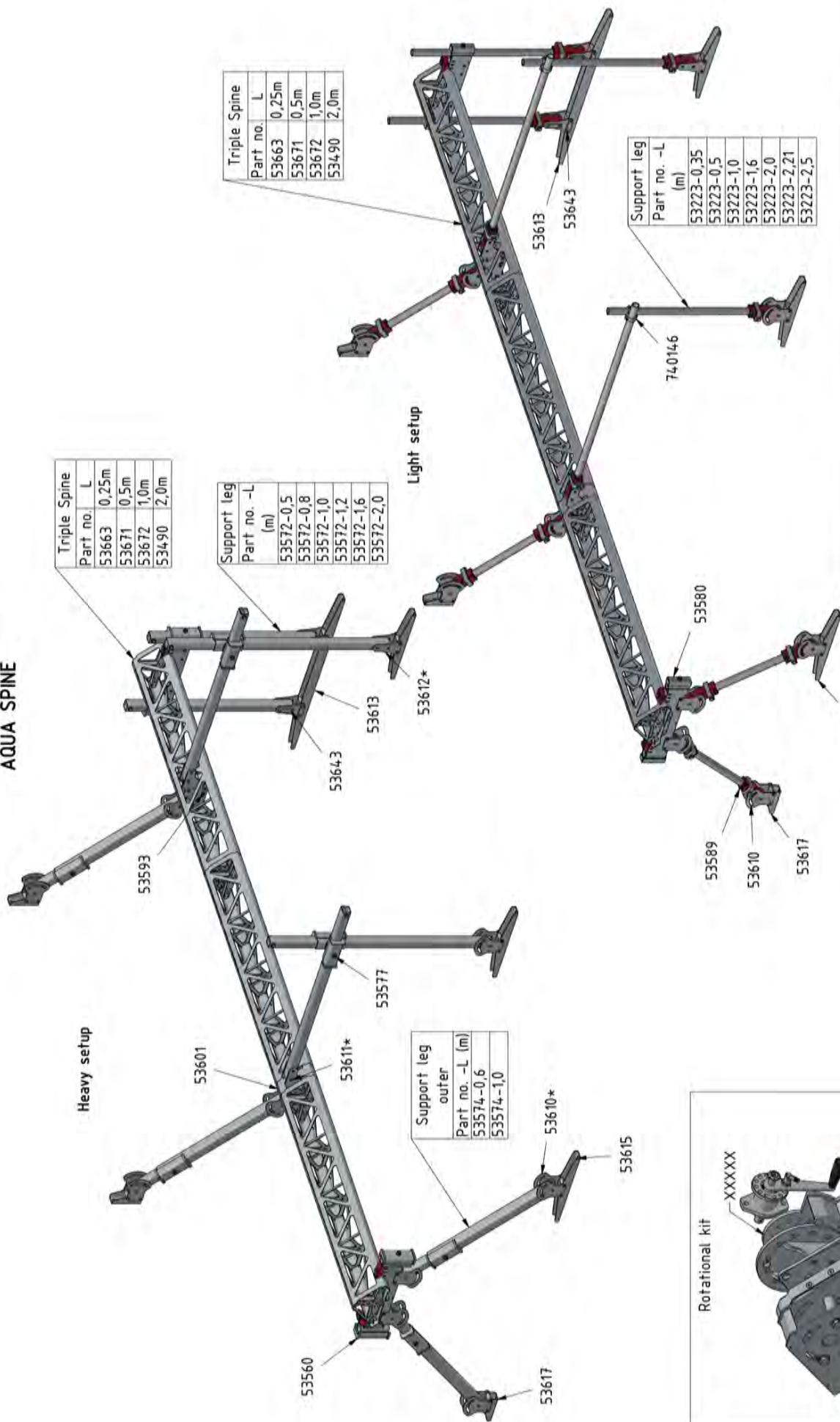


The updated Ergo Climber 3.0 attaches and moves along standard or curved scaffolding pipes. The new light Support System with traversable joints, that allow the Ergo Climbers to pass over without hindrance, makes it easier than ever to perform powerful Hydrodemolition work.



The Aqua Rail System 3.0 is a complete solution and includes the Aqua Spine 3.0, Ergo climber 3.0 and Support elements for all imaginable situations.

SUPPORT SYSTEM SETUP AQUA SPINE



Triple Spine	
Part no.	L
53663	0,25m
53671	0,5m
53672	1,0m
53490	2,0m

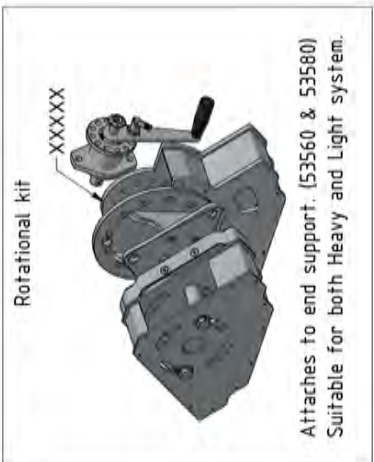
Support leg	
Part no. -L	(m)
53572-0,5	
53572-0,8	
53572-1,0	
53572-1,2	
53572-1,6	
53572-2,0	

Triple Spine	
Part no.	L
53663	0,25m
53671	0,5m
53672	1,0m
53490	2,0m

Support leg	
Part no. -L	(m)
53223-0,35	
53223-0,5	
53223-1,0	
53223-1,6	
53223-2,0	
53223-2,21	
53223-2,5	

Light setup

Heavy setup

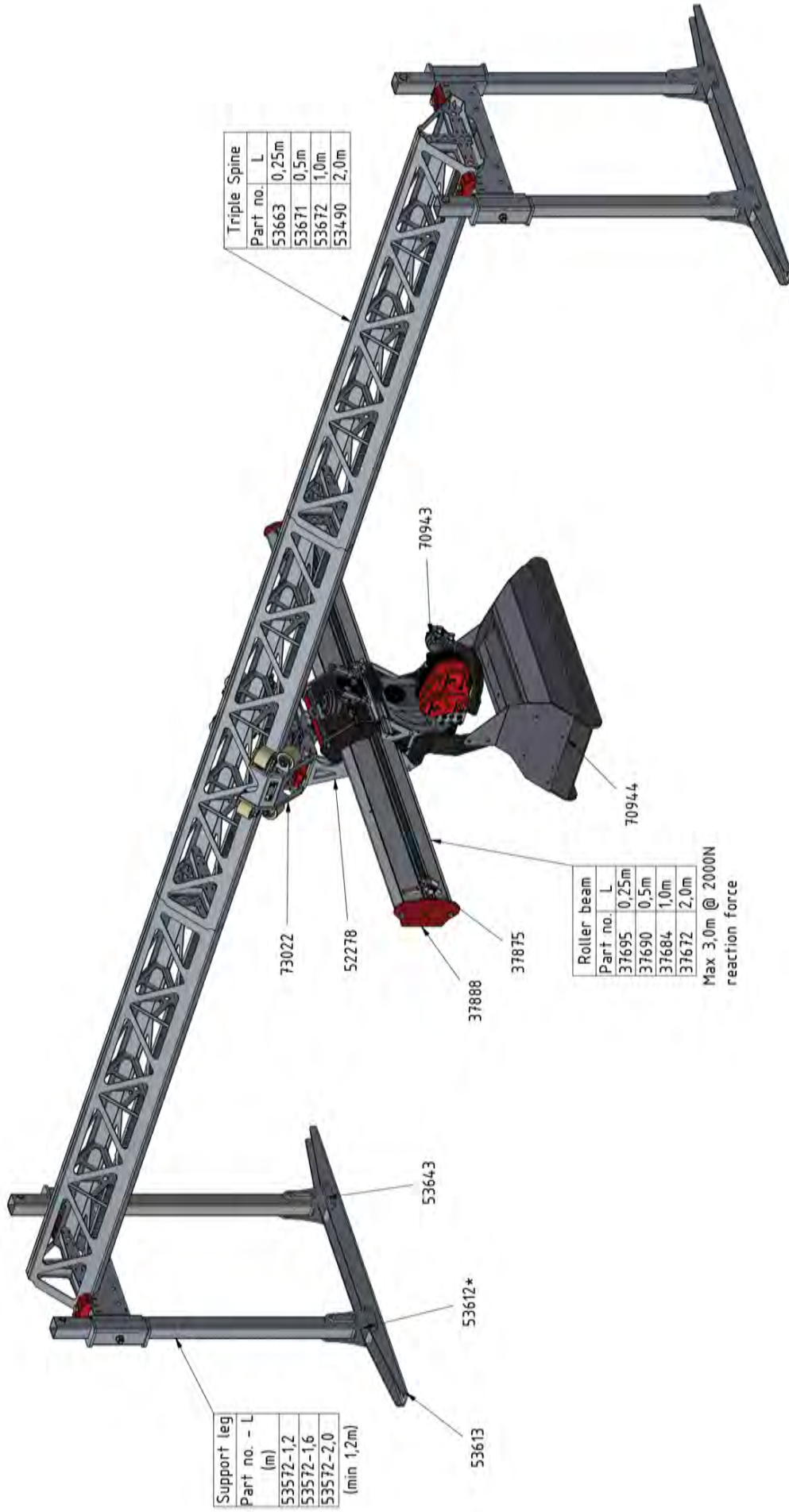


Attaches to end support. (53560 & 53580)
Suitable for both Heavy and Light system.

* = add 1pcs 53643
(threaded sheet metal CC80)

Def-nr	Ant	Benämning / Titel	Material	Dimension	Arnr / Ritnr
Konstr.	JR	Kontr. RH	General purpose (General of ISO 2768/13920)	General of: Yrskonstr. Yrskonstr. Yrskonstr.	
		Scale SE	1 : 25		
AGUAJET					Support system setup Spine
					Art.nr 73027 Datum 2024-11-07 Rev. 73027-9 B

LINED HYDRODEMOLITION, HEAVY SYSTEM, 750



Support leg	
Part no. - L	(m)
53572-1,2	1,2
53572-1,6	1,6
53572-2,0	2,0

(min 1,2m)

Triple Spine	
Part no. - L	(m)
53663	0,25
53671	0,5
53672	1,0
53490	2,0

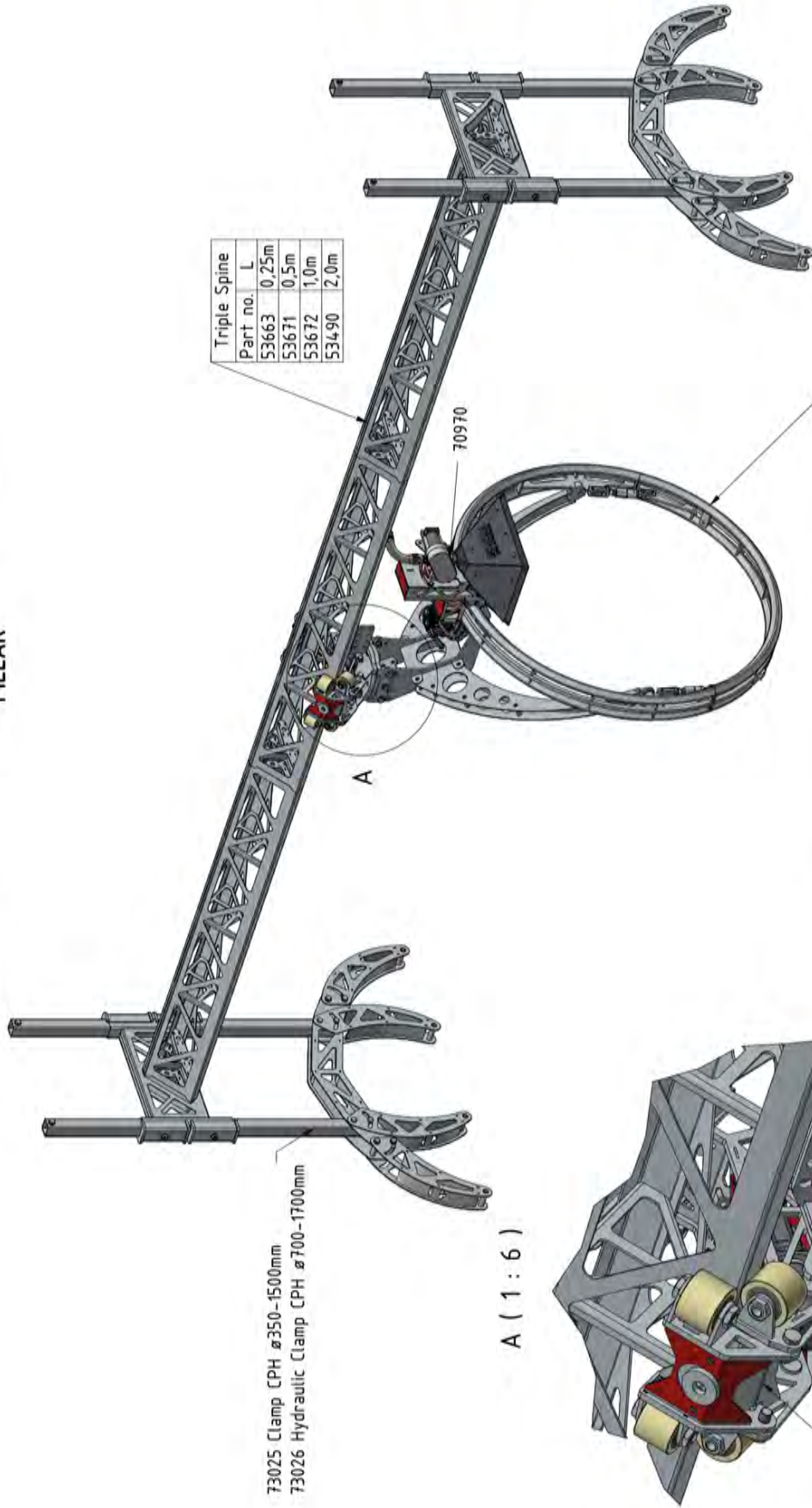
Roller beam	
Part no. - L	(m)
37695	0,25
37690	0,5
37684	1,0
37672	2,0

Max 3,0m @ 2000N
reaction force

Def-nr Konstr:	Ant. Reas:	Benämning / Titel (Godk.):	Material General tolerances ISO 2768/13920	Dimension General of jämhet, R _s	Arb / Ritn nr Ytebehandling
JR	RH	SE	1 : 15		
Lined hydrodemolition Heavy system 750					
AGUAJET					
				Art.nr 73027	Datum 2024-10-24
				Rev. 73027-5 A	

* = add 1pcs 53643
(threaded sheet metal CC80)

CIRCULAR HYDRODEMOLITION SETUP HEAVY SYSTEM PILLAR



Triple Spine	
Part no.	L
53663	0,25m
53671	0,5m
53672	1,0m
53490	2,0m

73025 Clamp CPH \varnothing 350-1500mm
73026 Hydraulic Clamp CPH \varnothing 700-1700mm

A (1 : 6)

70845 Circle frame \varnothing 1,0m (working area 350mm - 700mm)
70725 Circle frame \varnothing 1,5m (working area 700mm - 1200mm)
70831 Circle frame \varnothing 2,0m (working area 1200mm - 1700mm)

Del-nr Konstr.	Ant. R/Åad	JR	Kontr.	RH	Benämning / Titel Gode.	Skala	Material Generell tolerans/Generell yt- ISO 2768/13920	Dimension Generell yt- lämhet, R _s	Ytehandling	Arnr / Rtm nr
RH			RH	RH	RH	1 : 20				
AQUAJET										
Circular Power Head Aqua Spine 3.0										
										Art.nr 73027
										Rtm nr 73027-10-10
										Rev. 73027-7 A

CIRCULAR HYDRODEMOLITION SETUP LIGHT SYSTEM PILLAR & TUNNEL

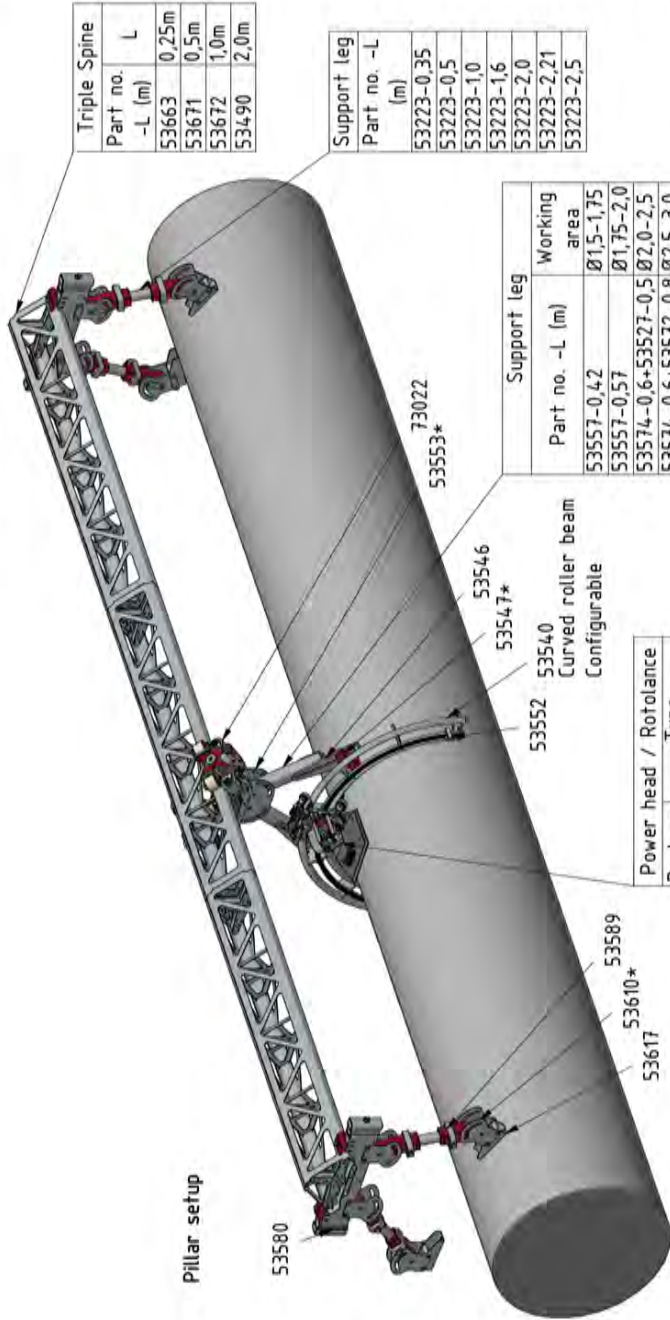
Curved beam limitations Pillar.
Smallest size Ø0,7m (beam centre diameter)

Vertical setup
360° ring, max Ø1,0m
180° ring, max Ø2,0m

Horizontal 90° setup
360° ring, max Ø1,5m
180° ring, max Ø3,0m

Horizontal under setup
360° ring, max Ø4,0m
180° ring, max Ø8,0m

Horizontal over setup
360° ring, max Ø3,0m
180° ring, max Ø6,0m



Triple Spine	
Part no.	L
53663	0,25m
53671	0,5m
53672	1,0m
53490	2,0m

Support leg	
Part no. -L	(m)
53223-0,35	
53223-0,5	
53223-1,0	
53223-1,6	
53223-2,0	
53223-2,21	
53223-2,5	

Support leg	
Part no. -L (m)	Working area
53557-0,42	Ø1,5-1,75
53557-0,57	Ø1,75-2,0
53574-0,6+53527-0,5	Ø2,0-2,5
53574-0,6+53572-0,8	Ø2,5-3,0

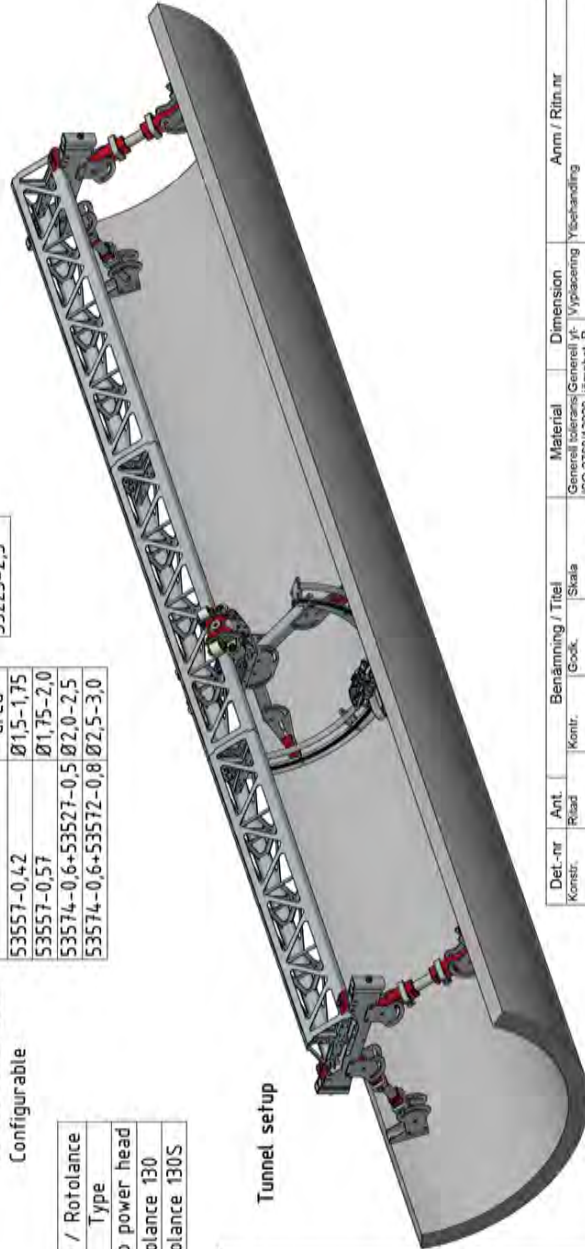
Power head / Rotolance	
Part no.	Type
73024	Ergo power head
70836	Rotolance 130
70835	Rotolance 130S

73025

Optional.
Pillar setup also possible with manual clamp. (73025) See CPH setup Heavy system.
Pillar diameter Ø0,35-1,5m.

Optional.
Tunnel setup also possible with Centralizer end carrier. (XXXXX)
See Tunnel setup Heavy system.
Tunnel diameter from 1,5-3m

* = add 1pcs 53643
(threaded sheet metal CC80)



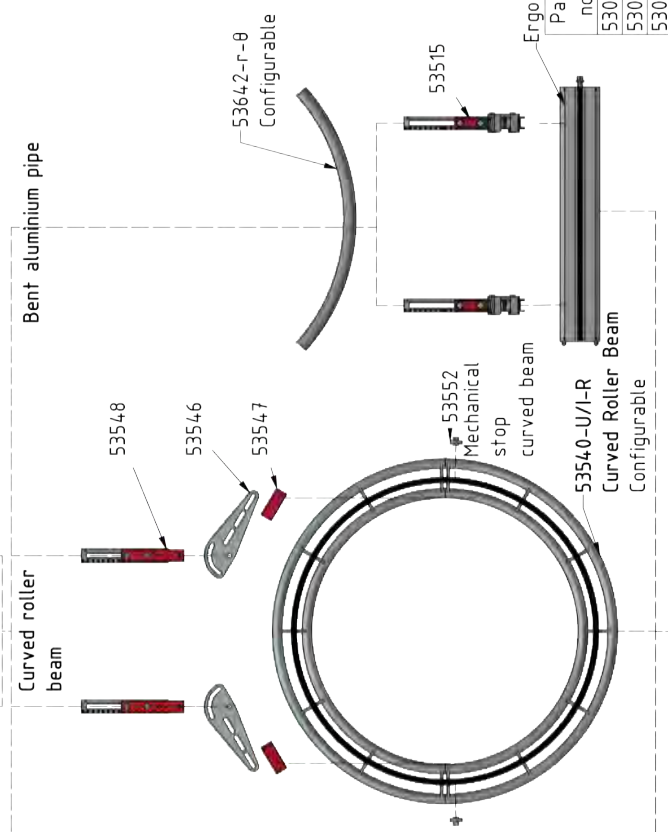
Del-nr / Konstr.	Ant. / Riset	Benämning / Titel	Material	Dimension	Arm / Ritm nr
		Skala	General tolerances / Generell yt-lagning	Ytbehandling	
		1 : 25	ISO 2768/13920	lammhet, R _s	
Circular hydrodemolition Light system Pillar & Tunnel					Art.nr
					73027
					Datum
					2024-11-12
					Rev.
					73027-8 A

AQUAJET

HYDRODEMOLITION SETUP ERGO CLIMBER

LINED HYDRODEMOLITION

CIRCULAR HYDRODEMOLITION Pillar & Tunnel



Curved beam limitations

	Vertical setup 360° ring, max Ø1,0m 180° ring, max Ø2,0m
	Horizontal 90° setup 360° ring, max Ø1,5m 180° ring, max Ø3,0m
	Horizontal under setup 360° ring, max Ø4,0m 180° ring, max Ø8,0m
	Horizontal over setup 360° ring, max Ø3,0m 180° ring, max Ø6,0m

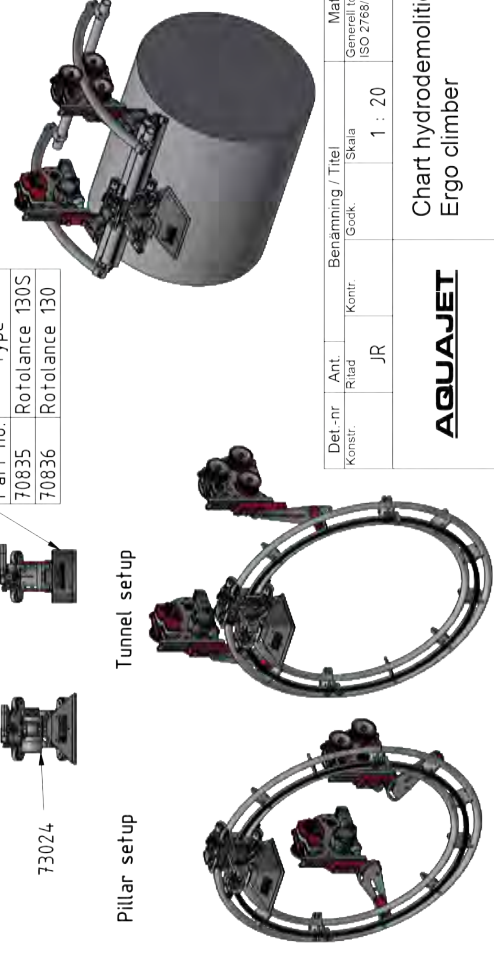
- 53515 Angle and height adjustable beam bracket
- 53501 Height adjustable beam bracket
- 53421 Beam Bracket
- 53422 Beam Bracket low

Ergo roller beam	Part no.	L
	53063	0,25m
	53060	0,5m
	53055	1,0m
	53450	2,2m

Ergo Rotolance	Part no.	Type
	70835	Rotolance 130S
	70836	Rotolance 130

Tunnel setup

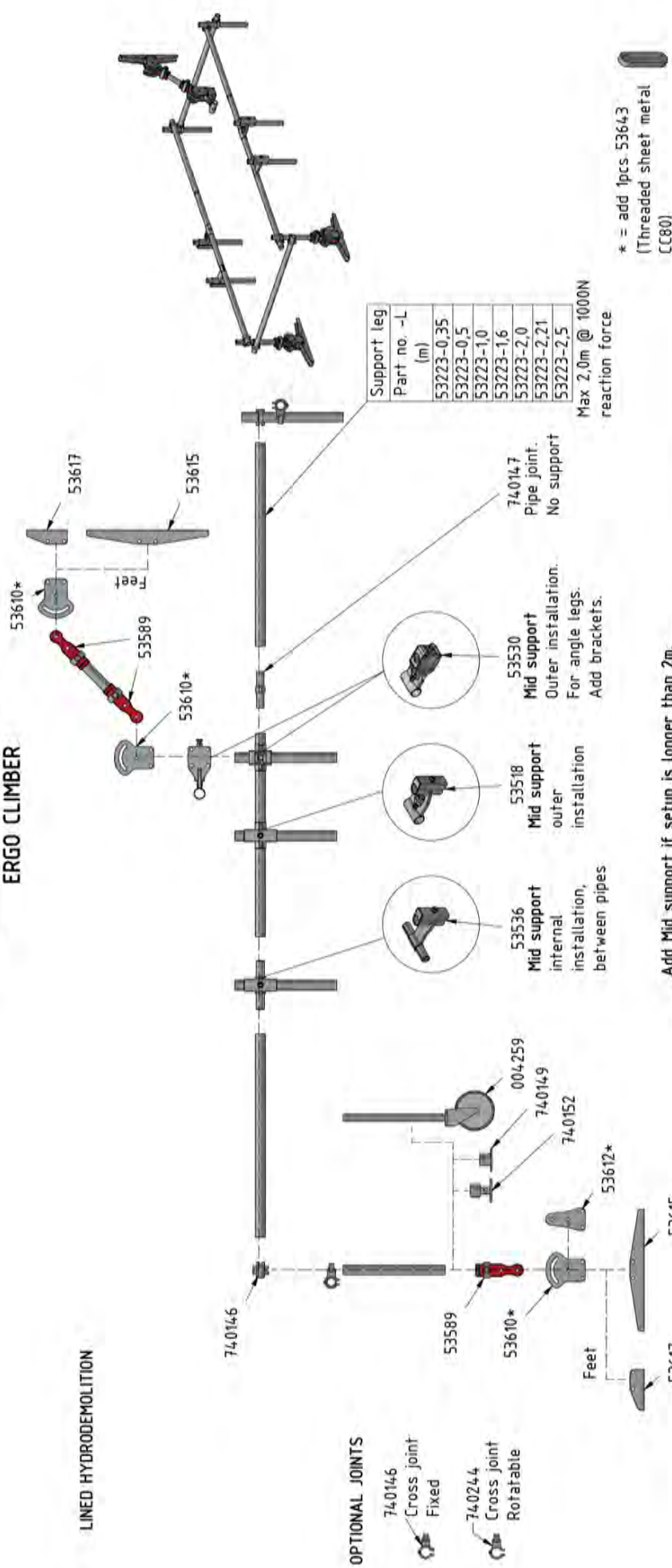
Pillar setup



Det.-nr Konstr.	Ant. Rt/ed	Benämning / Titel Godd.	Material Generell tolerans ISO 2768/13920	Dimension Generell yt- Vyplacering Jämnhet, R _a	Anm / Rtn nr Ybehandling
	JR	Kontr.	Skala 1 : 20		
AQUAJET					
Chart hydrodemolition setup Ergo climber					
				Actnr P1162-1366	Datum 2024-07-12
				Rtn nr	Rev 73027-3 A

SUPPORT SYSTEM SETUP ERGO CLIMBER

LINED HYDRODEMOLITION

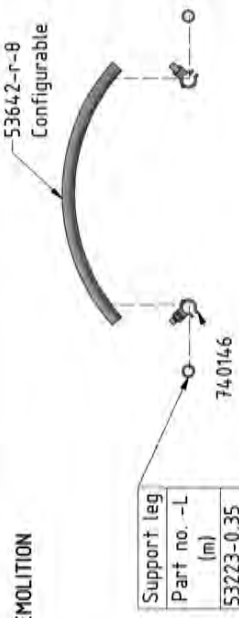


OPTIONAL JOINTS

- 740146 Cross joint Fixed
- 740244 Cross joint Rotatable

Add Mid support if setup is longer than 2m.

CIRCULAR HYDRODEMOLITION Pillar & Tunnel



Bent aluminium pipe limitations
Pillar, smallest pipe radius 545mm (working area Ø0,32m)
Tunnel, smallest pipe radius 300mm (working area 1,5m)



Pillar setup

Tunnel setup

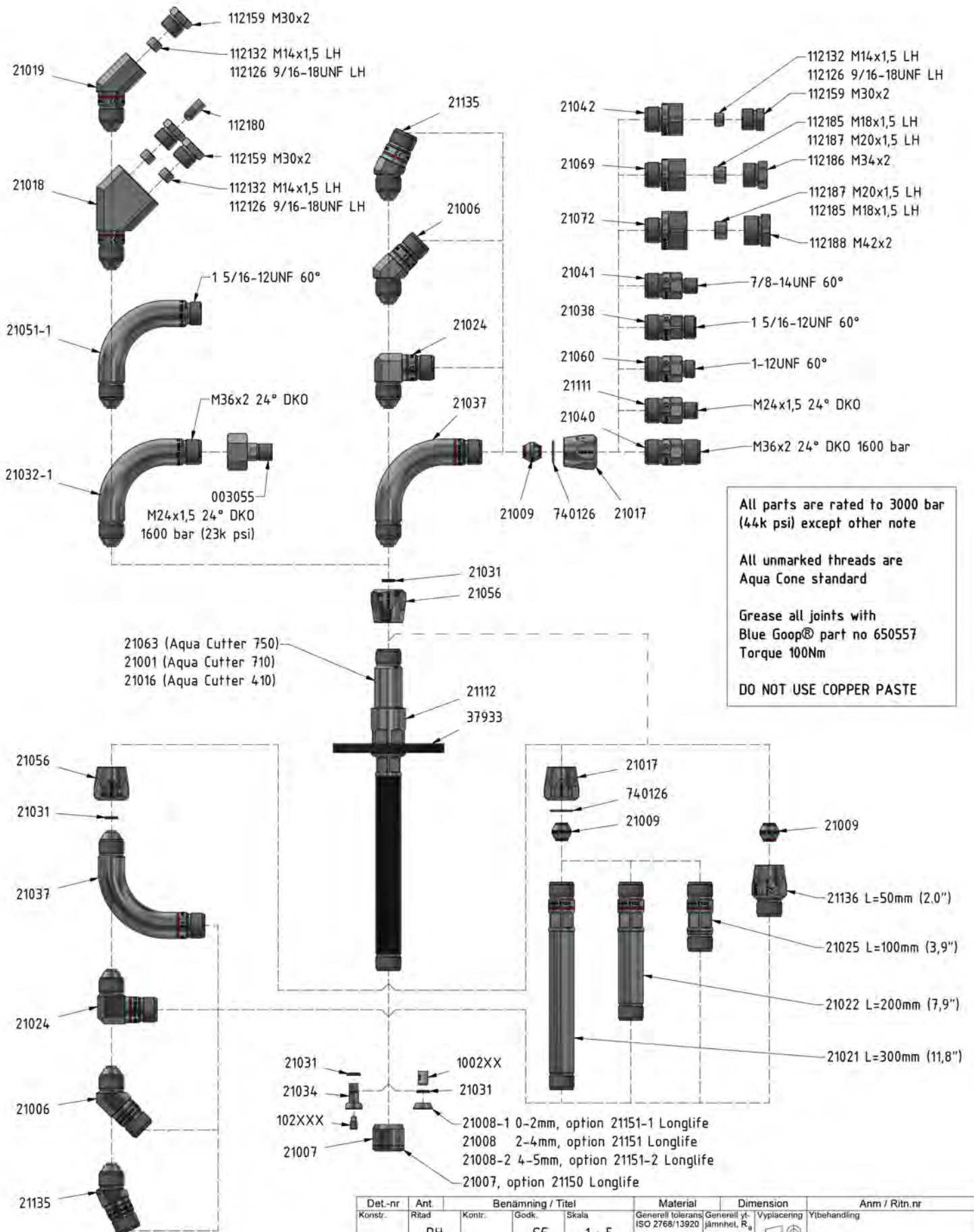
Support leg	Part no. -L	(m)
	53223-0,35	
	53223-0,5	
	53223-1,0	
	53223-1,6	
	53223-2,0	
	53223-2,21	
	53223-2,5	

Del-nr / Konstr.	Ant. / Rikad	Benämning / Titel / Godek.	Skala	Material	Dimension	Arb. / Ritn nr
	JR	RH	SE	General tolerans / ISO 2768/1320	General y- / Vytöjning / mmhet, R _s	Ytebehandling
			1 : 20			

AQUAJET		Chart support system setup Ergo Climber	
Art.nr 73027	Datum 2024-11-06	Rev. 73027-4 A	

Installation of the Circular hydrodemolition system at the work object is adapted at each the workplace by the customer.

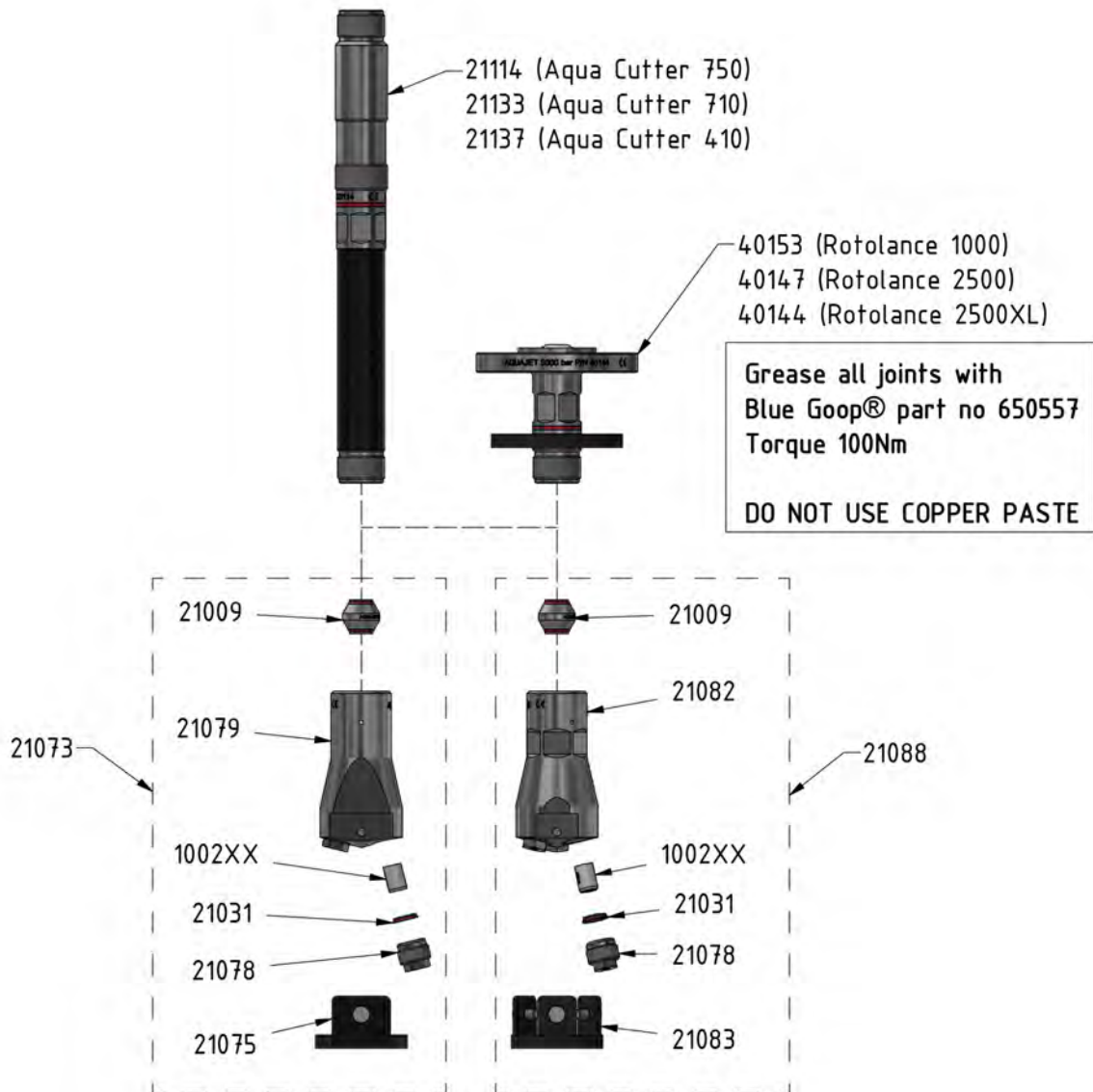
Super Lance System



All parts are rated to 3000 bar (44k psi) except other note
 All unmarked threads are Aqua Cone standard
 Grease all joints with Blue Goop® part no 650557 Torque 100Nm
DO NOT USE COPPER PASTE

Det.-nr	Ant.	Benämning / Titel		Material	Dimension	Anm / Ritn.nr
Konstr.	Ritad	Konstr.	Godk.	Skala	Generell tolerans ISO 2768/13920	Generell yt-jämnhet, R _a
	RH		SE	1 : 5		
AQUAJET						
Superlans system komplett						Art.nr 70951
Super lance system						Datum 2022-04-20
						Rev. 70951 F

Dual and Triple nozzles



Det.-nr	Ant.	Benämning / Titel		Material	Dimension	Anm / Ritn.nr	
Konstr.	Ritad	Kontr.	Godk.	Skala	Generell tolerans ISO 2768/13920	Generell yt- jämnhet, R _a	
	SE			1 : 5			
AQUAJET		Dubbel och trippeldysa 3000bar				Art.nr	Datum
		Översikt					2023-10-05
		Dual and tripple nozzle				Ritn.nr	Rev.
							73003 A

AQUAJET EQUIPMENT



Hydrodemolition robots



Aqua Rail Systems



Hydrodemolition high-pressure pumps



Wastewater treatment system



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