HGG

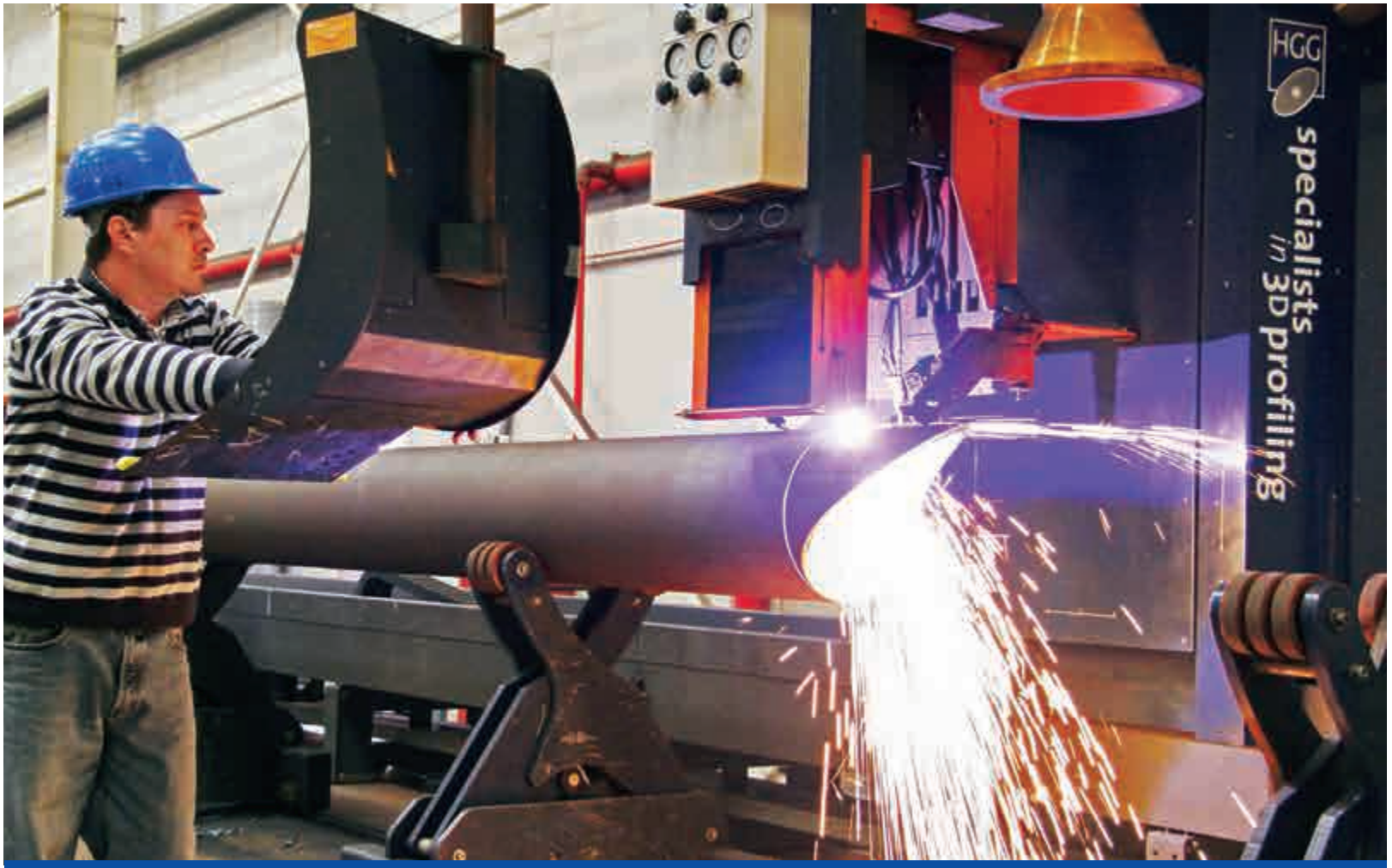
آرتین بنیان

ARTIN BONYAN CO.

specialists *in* 3D profiling

PRODUCTS & SERVICES



Welcome to the World of HGG!

HGG is the global leader in 3D profiling solutions. We are known worldwide for our high-end and innovative cutting machinery.

Our strength lies in the unique synergy created by the combination of machine construction and our cutting services for third parties.

“I’m a proud owner”

Join over 400 owners of HGG cutting machines worldwide. Choose from a broad assortment of 3D cutting machines to ease up your fabrication work. Save over 30% on your welding and fitting costs and speed up your fabrication throughput with our production automation solutions.

“The machine leads us 30 years into the future”

“I used HGG’s Profiling Contractors”

Let us do the cutting for you. We have the expertise and the capacity which you may not have at a particular moment. Our machine park with 9 machines is at your service to instantly provide cutting capacity for pipes, beams and box sections in a multi-shift production environment.

“Being provided with batches of material bundled to assembly order, with continuous quality makes HGG very reliable and allows us to focus on what we are good at”

“I hired HGG on-site”

With our transportable machines we bring our cutting expertise to your fabrication yard or a remote building site. We can train you to do the job or supply you with the full work preparation and a skilled operator.

“We had HGG send over their machine and within a week, the machine was set-up, our people were trained and we were running the whole cutting process ourselves”

Mr. Ole Nygaard

Victor Offshore Marine Energy

Victor A/S delivers solutions to the offshore, marine and energy industries worldwide. Victor A/S is specialised in refrigeration & HVAC, piping & process, subsea & structures.

Frederikshavn, Denmark
Machine: ProCutter 600

"The ProCutter 600 makes the welding job a lot easier. After cutting, parts just fit together very nicely. We save a lot of time by doing the weld preparations."
Mr. Ole Nygaard – Managing Director

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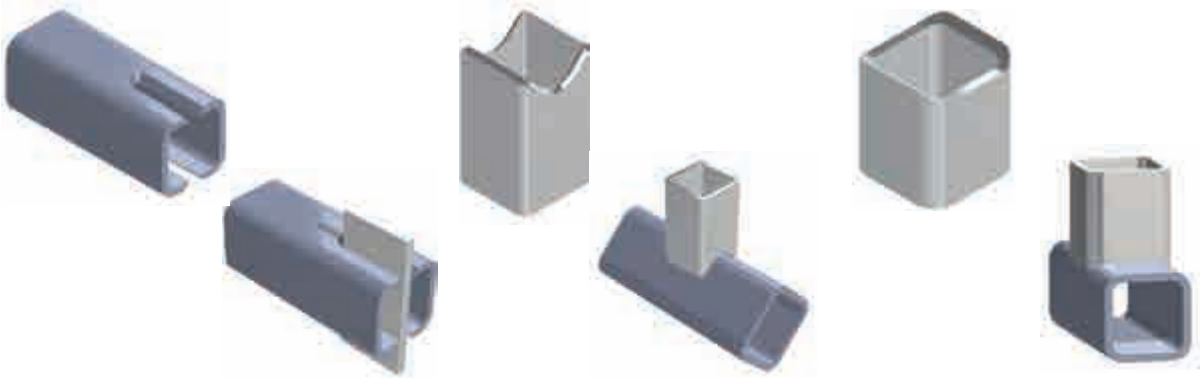
Legenda

	*Maximum diameter*
	*Maximum weight*
	*Maximum length*
PT	*Pipe trolley*
RG	*Rollerball gutter*
RB	*Roller bed*
	*Oxyfuel cutting*
	*Plasma cutting*
	*Marking text or shapes*
	*Pipe cutting*
	*Box section cutting*
	*Beam cutting*
	*Profile cutting*

Profiling Shapes

Pipe Cutting

Box Section Cutting

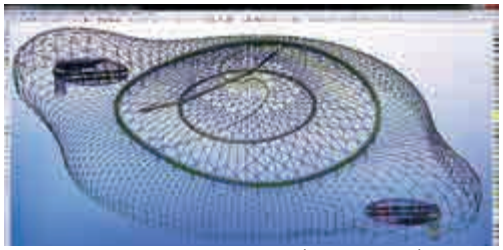


A Small Selection

Beam Cutting

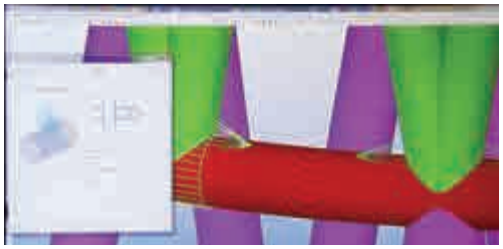
Profile Cutting

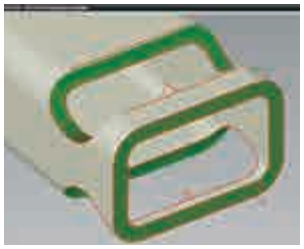
Design & Detailing



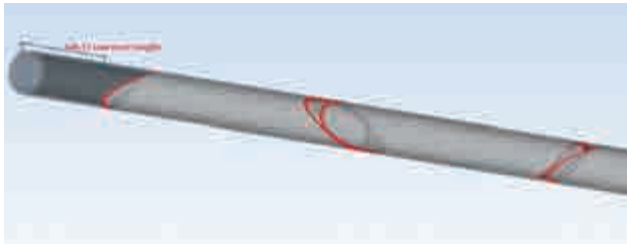
Multi Purpose Stadium Qatar

No more double input
Modelling with CAD software to create cutting data.





Optimise your weld preparation to save costs
Extensive detailing features (including detailing of STEP files).



Use your expensive raw materials in the most efficient way
HGG´s optimised nesting module reduces scrap to a minimum.

Design & Detailing
Avoid double work

Tools for efficient production planning

HGG builds all of its software in-house allowing you to use the data from your own model to interface with your company software and to use tools for efficient production planning.

Detailing and production planning is subjected to continuous changes where reference to a single source of data requiring changes is fundamental to avoid losing time and double work.

Interfacing to all CAD systems

Single time data entry through the model. No reworking required.

Minimum machine downtime

Avoiding mistakes in production ensures minimum machine stops and material waste. The 3D viewer allows generated parts to be checked for all materials and data file formats.

Part assignment to stock database

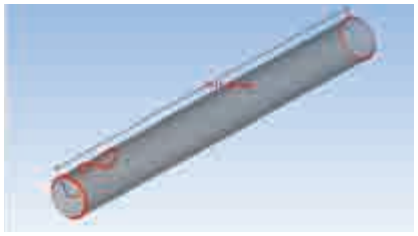
Nesting software connected to a database (MySQL) avoids unnecessary material waste or machine re-adjustments.

Tight planning of production

Estimation software and weld volume calculation to forecast a project. Knowing what and when to produce and how long it will take.

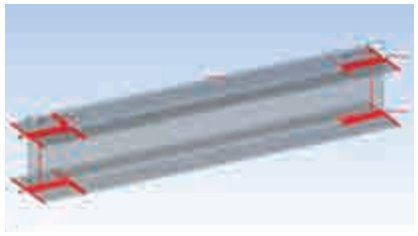
Our machines read NC data files coming from your model, with functionality to check exported files from the model and the tools to efficiently plan your production!

Re-use of design data avoids double work and reduces error sensitivity.



HGG's 3D viewer with pipe

Production planning report



HGG's 3D viewer with beam

Fitting & Welding

Rapid and accurate fitting of parts
With HGG´s extensive marking features.

Facilitates optimal welding
Through smart weld preparation.

Efficient planning for fitters and welders
With HGG´s estimation software.

Fitting & Welding
Save on your welding costs

No more time wasted on secondary processes

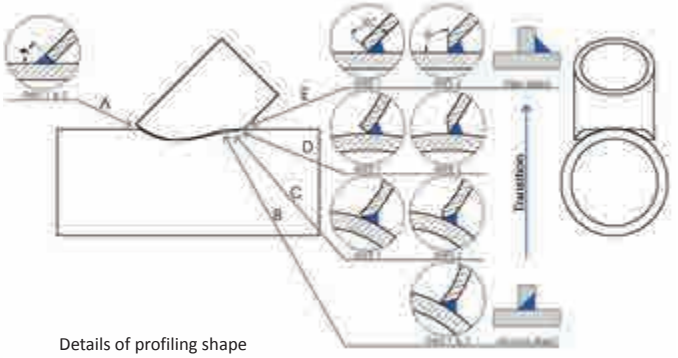
By preparing the entire lay-out of your sub-assembly and marking part names and footprints of welding attachments. Save time and materials in the final stages of production.

Reducing the welding time

By in house developed profiling shapes with pre-programmed parameters for efficient welding. No grinding required, merely a touch-up will suffice.

HGG's machines are capable of cutting parts with any weld detail you wish. The weld volume saving routines and markings facilitate easy fitting!

Save 30% on your fitting and welding costs.



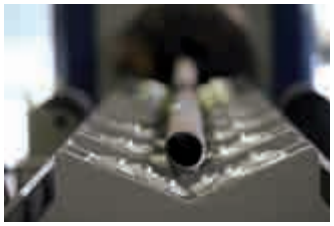
Details of profiling shape

ProCutter 600

***ProCutter** 600*	*48 mm - 610 mm (2” - 24”)*	*3t*	*6 m - 12 m* *20’ - 40’*

Adjustable supports
to level pipes at cut location.

Height adjustable chuck
to support a large range of pipe diameters.



Permanent horizontal support
to improve handling (max 410 mm).

3-Jaw chuck
for pipe centring and accurate rotation.

Compact cutting arm
to perform 3D cutting routines.

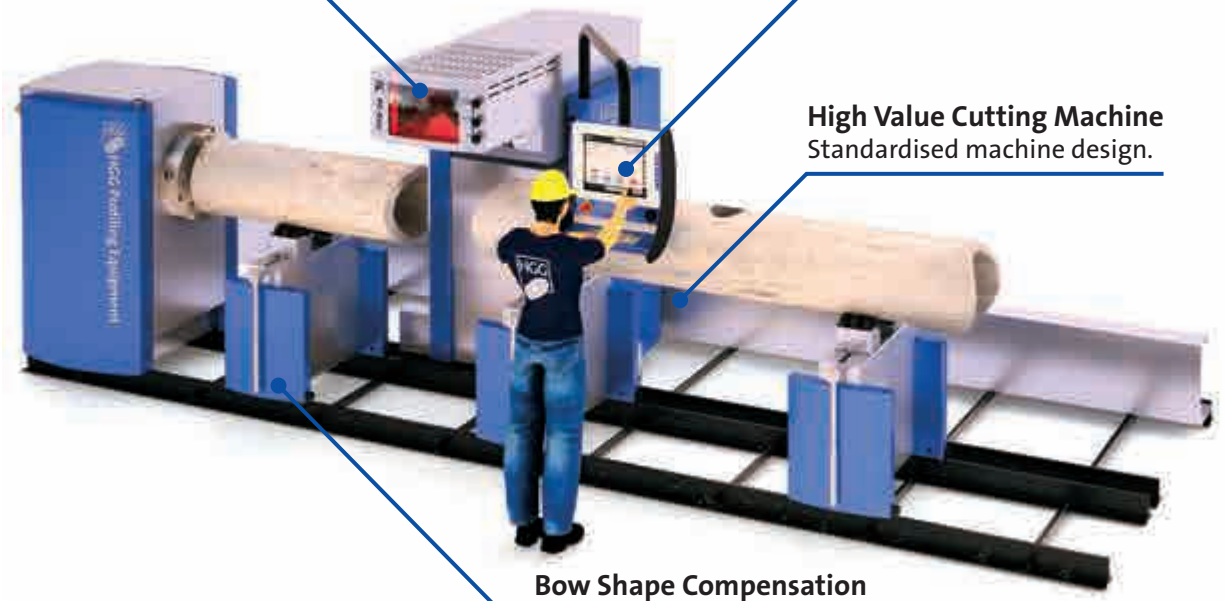
Oxyfuel and/or plasma cutting
to cut carbon steel or alloys.

Chuck-type Pipe Profiler
Highly standardised

The ProCutter 600 incorporates the benefits of a chuck type machine for accuracy and the benefits of individual pipe supports for versatile material processing.

Oxyfuel and/or Plasma
Highly accurate cuts.

Design Freedom
Many profiling shapes available, specially tuned for the ProCutter 600.



High Value Cutting Machine
Standardised machine design.

Bow Shape Compensation
Adjustable pipe supports.

SPC 500 - 1200 PT

	○		⟷
SPC 500	48 mm - 510 mm (2" - 20")	8t	6 m - 12 m* 20' - 40'*
SPC 600	48 mm - 610 mm (2" - 24")		
SPC 800	48 mm - 815 mm (2" - 32")		
SPC 1000	48 mm - 1020 mm (2" - 40")	8t - 12t	
SPC 1200	48 mm - 1225 mm (2" - 48")		

*Length customisable by increments of 2 m (6')

Adjustable supports
to level pipe at cut location.

Marking
for traceability and easy fit-up.

Permanent horizontal support
to improve handling.

High precision chuck
for pipe centring and accurate rotation.

Patented AutoFocus robot
to perform 3D cutting routines.

Oxyfuel or plasma
cutting to cut carbon steel or alloys.

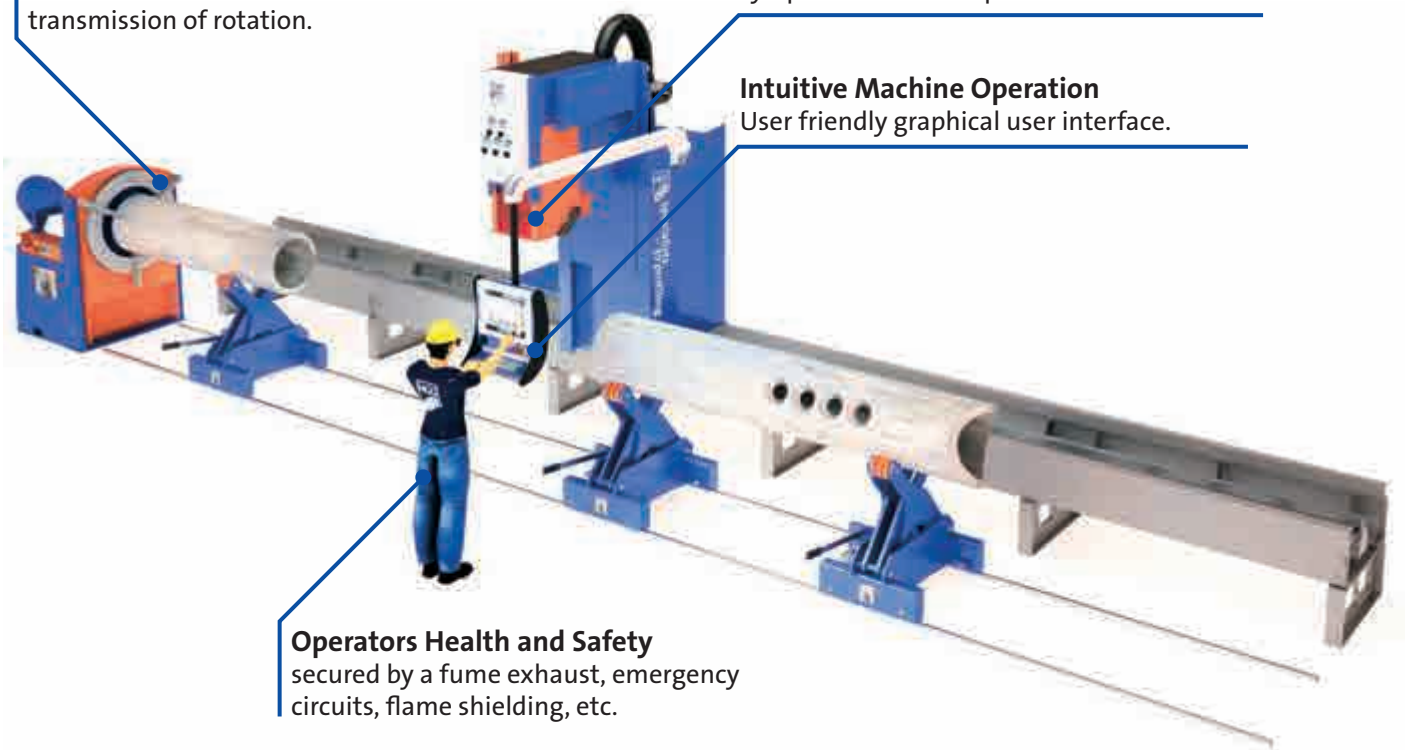
Chuck-type Pipe Profiler
Highly accurate & versatile

The SPC-PT uses the benefits of a chuck type machine for accuracy and the benefits of individual pipe supports for versatile material processing.

Accurate Pipe Positioning
with a chuck to achieve a one to one transmission of rotation.

Accurate 3D Cutting
by a patented and compact AutoFocus robot.

Intuitive Machine Operation
User friendly graphical user interface.



Operators Health and Safety
secured by a fume exhaust, emergency circuits, flame shielding, etc.

SPC 660 - 1200 RB

	○		⟷
SPC 660 RB	*48 mm - 660 mm (2” - 26”)*	*5t*	*6 m - 12 m* 20’ - 40’**
SPC 1200 RB	*75 mm - 1225 mm (3” - 48”)*	*12t*	

*Length customisable by increments of 2 m (6’)

Tandem wheel sets
to level pipe at cut location and allow out-feed during cutting.

Marking
for traceability and easy fit-up.

Conveyors and buffer tables
allowing full line processing.

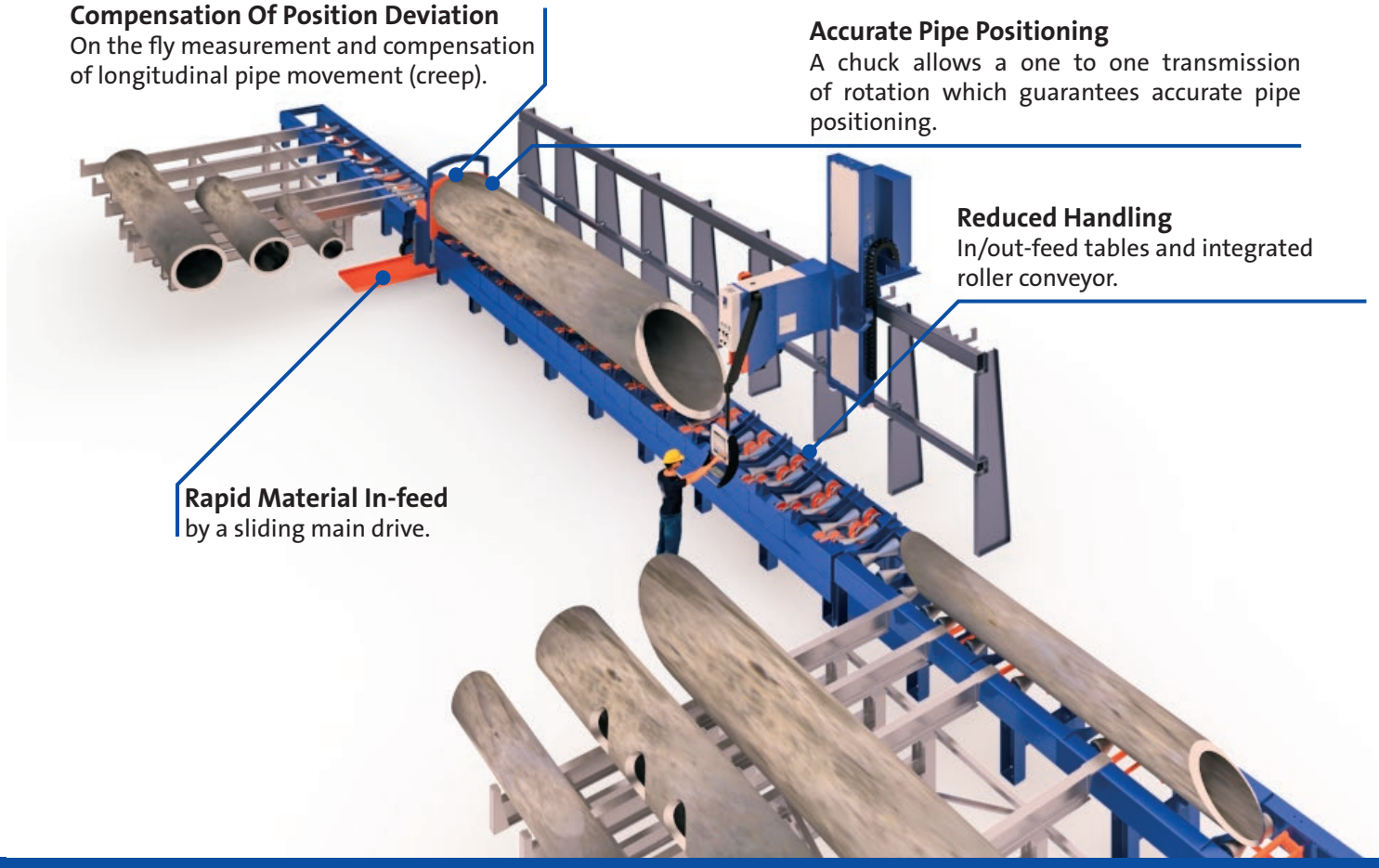
3-Jaw floating chuck
for pipe centring and accurate rotation. Slides sideways for material infeed.

Patented AutoFocus Robot
to perform 3D cutting routines.

Oxyfuel or plasma cutting
to cut carbon steel or alloys.

Chuck-type Pipe Profiler
Highly accurate & logistically optimised

The SPC-RB uses the benefits of a chuck type machine for accuracy and the benefits of a roller bed machine with a roller conveyor for optimized logistics.



SPC 1500 - 3000 PT

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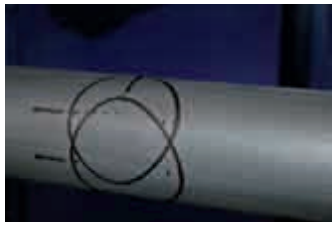
SPC 1500	*75 mm - 1525 mm (3" - 60")*	*12t - 30t*	*6 m - 12 m* (20'- 40')**
SPC 2000	*100 mm - 2035 mm (4" - 80")*	*18t or 30t*	
SPC 2500	*100 mm - 2500 mm (4" - 98")*	*30t or 40t*	
SPC 3000	*100 mm - 3000 mm (4" - 118")*	*30t or 40t*	

*Length customisable by increments of 2 m (6')

Adjustable supports
to level pipe at cut location.



Marking
for traceability and easy fit-up.

Heavy load supports
to level 4000 mm OD pipe at cut location.

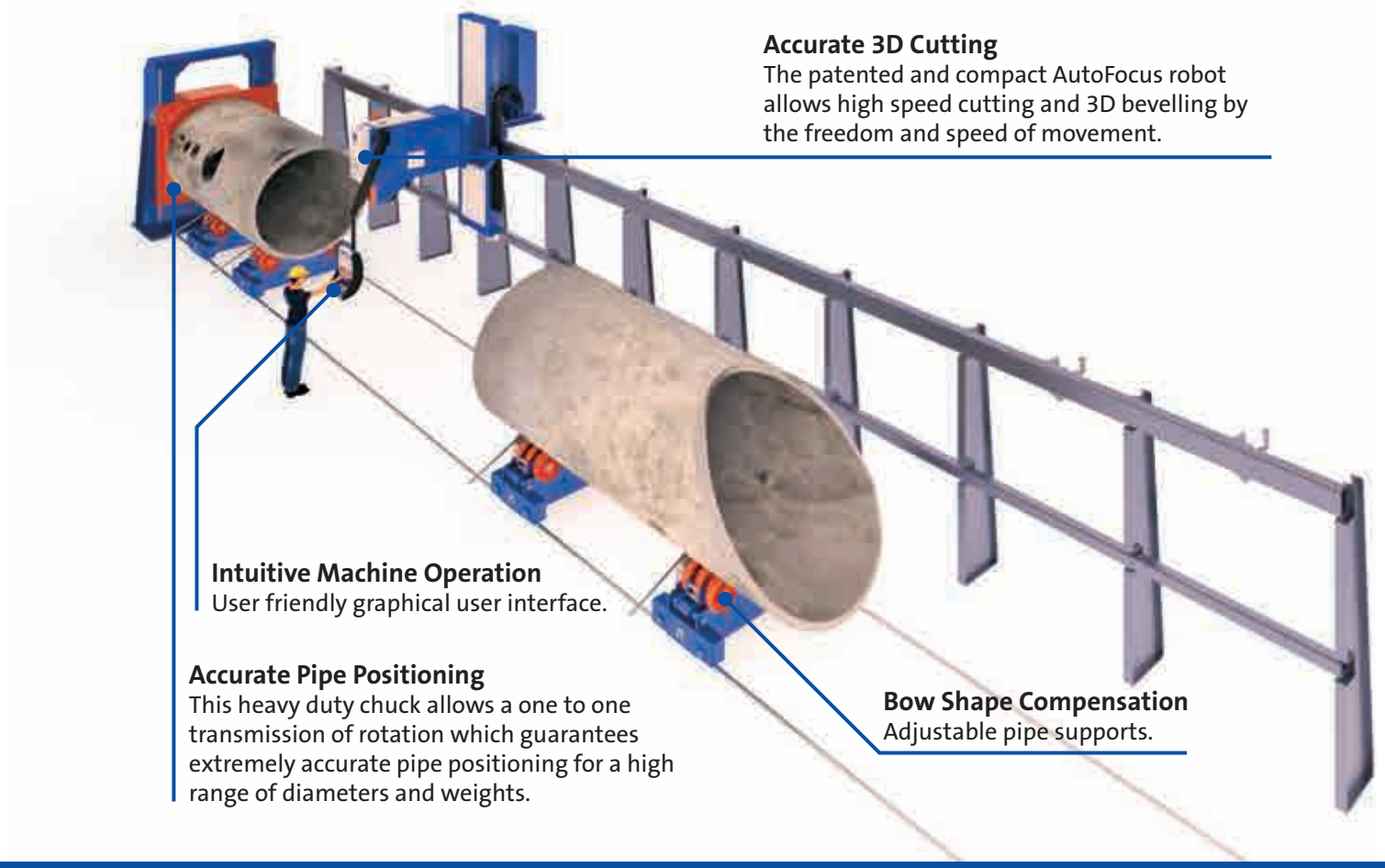
Heavy duty precision chuck
for pipe centring and accurate rotation.

Patented AutoFocus robot
to perform 3D cutting routines.

Oxyfuel or plasma cutting
to cut carbon steel or alloys.

Chuck-type Pipe Profiler
Highly accurate & versatile

The SPC-PT uses the benefits of a chuck type machine for accuracy and the benefits of individual pipe supports for versatile material processing.



Accurate 3D Cutting
The patented and compact AutoFocus robot allows high speed cutting and 3D bevelling by the freedom and speed of movement.

Intuitive Machine Operation
User friendly graphical user interface.

Accurate Pipe Positioning
This heavy duty chuck allows a one to one transmission of rotation which guarantees extremely accurate pipe positioning for a high range of diameters and weights.

Bow Shape Compensation
Adjustable pipe supports.

RBPC 660 - 2000

	○		⟷
***RBPC** 660*	*48 mm - 660 mm (2” - 26”)*	*5t*	*6 m - 12 m* 20’ - 40’**
***RBPC** 1200*	*75 mm - 1225 mm (3” - 48”)*	*18t*	
***RBPC** 1500*	*100 mm - 1525 mm (4” - 60”)*	*25t*	
***RBPC** 2000*	*250 mm - 2035 mm (9” - 80”)*	*30t*	

*Length customisable by increments of 2 m (6’)

Tapering and double bevels
The RBPC is able to cut these shapes on both sides of a pipe.

Marking
for traceability and easy fit-up.

Conveyors and buffer tables
allowing a full line process.

CNC driven tandem wheel sets
of an RBPC 1200 to minimise cut deviation by compensation of roughness like weld seams.

Patented AutoFocus robot
to perform 3D cutting routines.

Oxyfuel or plasma cutting
to cut carbon steel or alloys.

Rollerbed Pipe Profiler
Logistically optimised

The RBPC is a roller bed machine with a built-in roller conveyor for optimised logistics.

Reduced Handling
In/out-feed tables and integrated roller conveyor.

Accurate 3D Cutting
by use of CNC driven tandem wheel sets and HGG's patented AutoFocus robot.

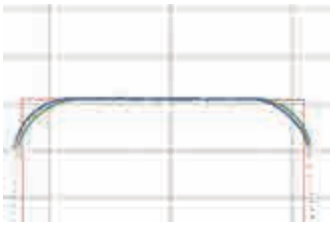
High Efficiency Through Roller Bed
Zero scrap length and rapid handling of parts with tapering or two sided bevels.

MPC

	○	□	—		⟷
MPC 450 | 500	48 mm - 510 mm (2" - 20")	60^2 mm - 450^2 mm 2^{2}" - 18^{2}"	On customer demand	8t	6 m - 12 m* 20' - 40'*
MPC 450 | 600	48 mm - 610 mm (2" - 24")			8t	
MPC 450 | 800	48 mm - 815 mm (2" - 32")			8t	
MPC 450 | 1000	48 mm - 1020 mm (2" - 40")			8t - 12t	
MPC 450 | 1200	48 mm - 1225 mm (2" - 48")			8t - 12t	

*Length customisable by increments of 2 m (6')

Box section support
HGG has developed a special rotator with easy top loading.



Laser measurement
to detect and compensate position deviations and section distortions.

High precision chuck
for material centring and accurate rotation.

Versatility
The machine is able to cut pipe, box section and flat bar on request.

Patented AutoFocus robot
to perform 3D cutting routines.

Oxyfuel or plasma cutting
to cut carbon steel or alloys.

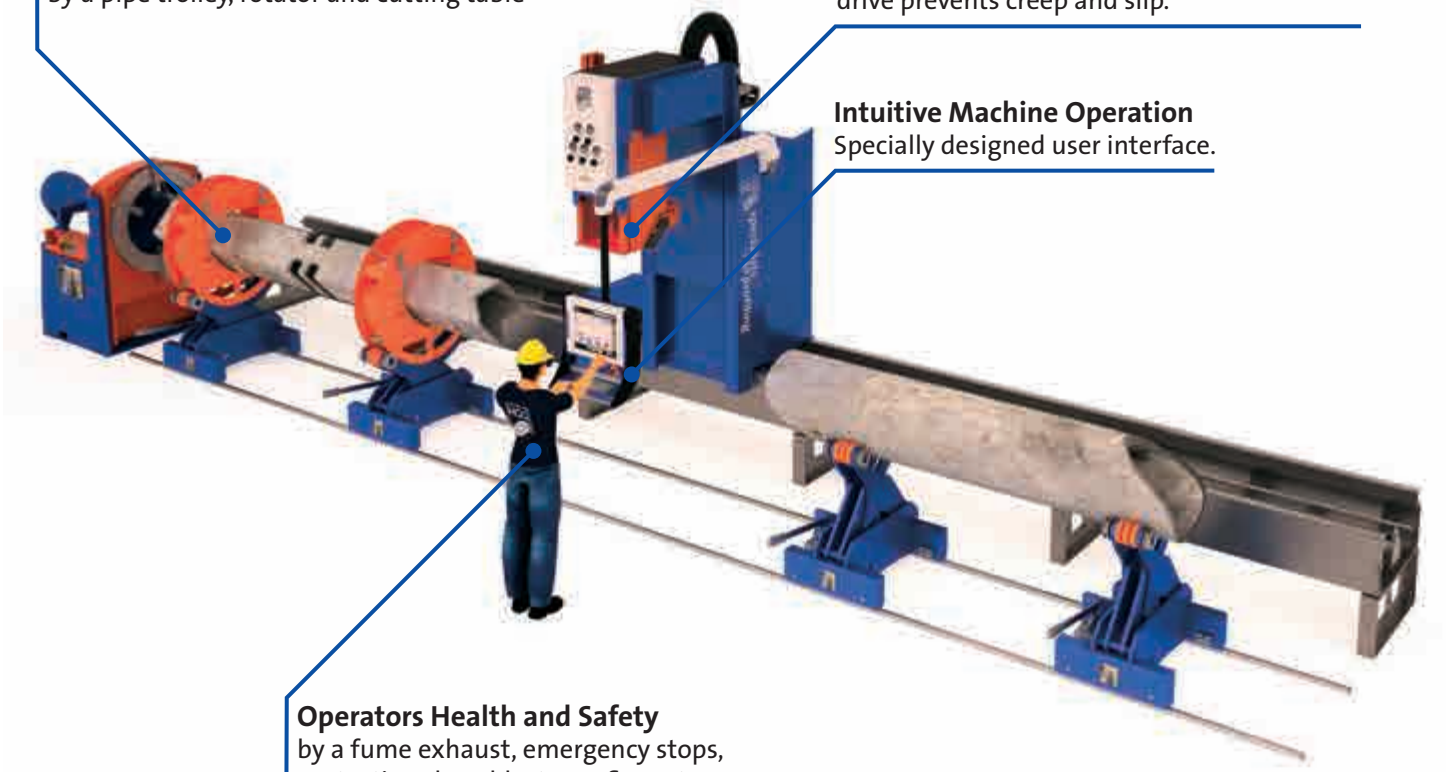
Pipe and Box Section Profiler
Highly accurate & versatile

The MPC 450 uses the benefits of a chuck type machine for accuracy and the benefits of individual pipe supports for versatile material processing.

Pipe, Box Section and/or Flat Bar Cutting
by a pipe trolley, rotator and cutting table

Accurate 3D Cutting
HGG's patented AutoFocus robot guarantees accurate torch movements, while the main drive prevents creep and slip.

Intuitive Machine Operation
Specially designed user interface.



Operators Health and Safety
by a fume exhaust, emergency stops, protective glass, blast proofing, etc.

TCL 400

TCL 400	*48 mm - 406 mm (2” - 16”)*	*4.2t*	*6 m - 12 m 20’ - 40’*

*Length customisable by increments of 2 m (6’)

Press & Play machine operation
A fully automated machine with intuitive user interface.

Automatic pipe loading
Place multiple pipes (bundle) at once. Loading occurs automatically.

Accurate pipe cutting
The biaxial AutoFocus robot ensures accurate cuts.

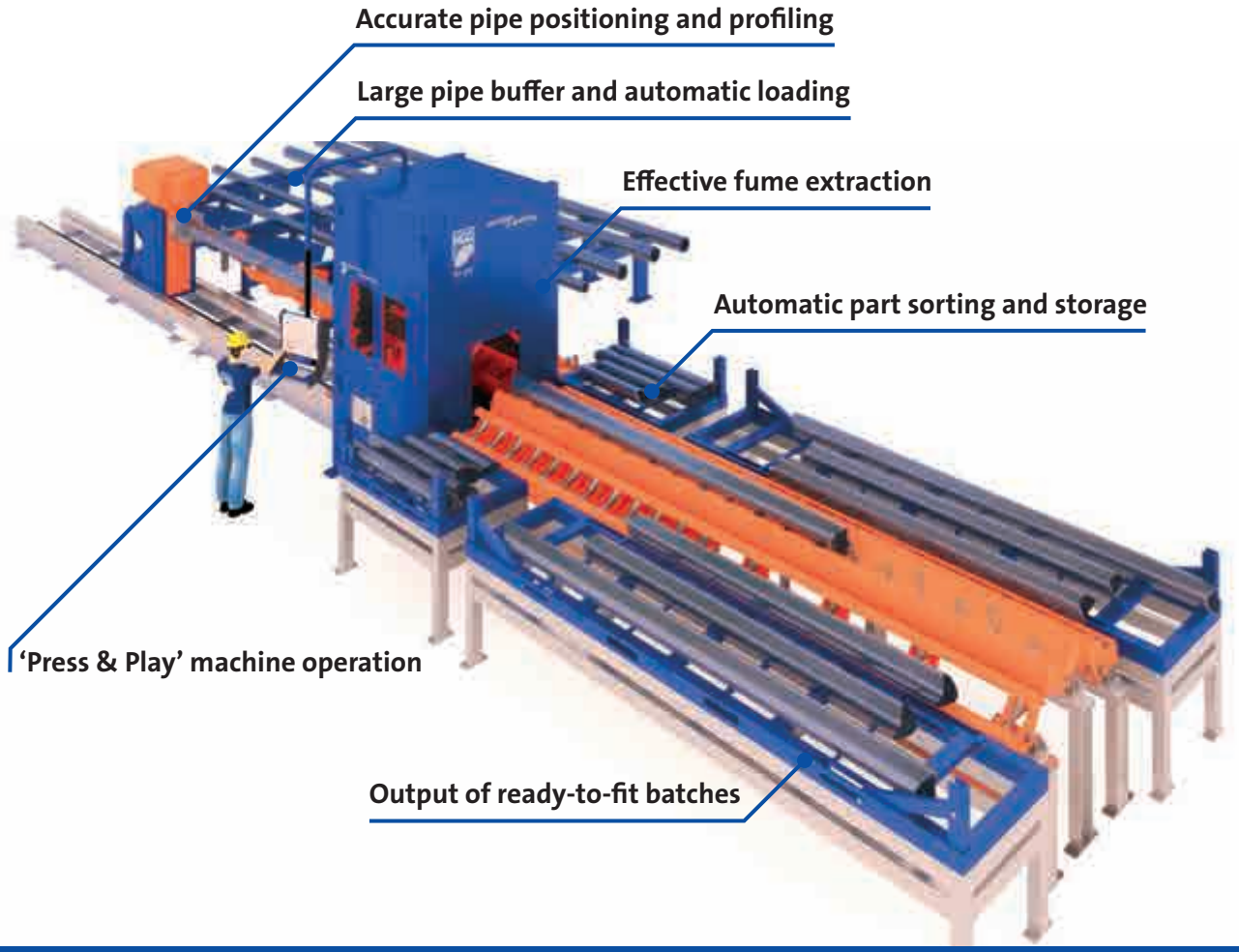
Effective fume extraction
Achieved by use of a cutting cell and extraction through the main drive.

Sideways aligned outfeed
Sorts parts on sloped tables so that they roll to the far end.

Centrally aligned outfeed
Sorting parts into casettes results in efficient logistics after cutting.

Pipe Cutting Line
Fully automated and highly productive

The TCL brings the ultimate automation in pipe cutting. Both the machine's productivity and cutting precision are supreme in its diameter range. The TCL further excels in the fully automated production process from stock pipe to batches of fit-ready parts.



Q - Profiler

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***Q** - Ship Building*	*max. 450 mm 17.7”*	*max. 450 mm 17.7”*	*max. 150 x 150 mm 5.9”x 5.9”*	*max. 300 x 300 mm 11.8”x 11.8”*	-	-
***Q** - Offshore Structural*	-	-	*max. 150 x 150 mm 5.9”x 5.9”*	*max. 300 x 300 mm 11.8”x 11.8”*	*max. 400 x 110 mm 15.7”x 4.3”*	*max. 400 x 300 mm 15.7”x 11.8”*

*Length customisable by increments of 2 m (6’)

A compact Staubli robot arm
enables quick movements and rapid and accurate cuts.

A minimum need for grinding
achieved by accurate cuts and smart cutting paths.

Scan viewer
to compare the theoretical and the corrected path after measurement.

Cutting table
to support the material over the full length.

Material measurement
A laser is mounted on the cutting torch to detect deviations and distortions.

Oxyfuel or plasma cutting
to cut carbon steel or alloys.

Q - Profiler
Highly versatile

The Q-Profiler is a highly versatile robotic cutting machine that is able to cut a wide variety of materials like beams, bulbs and bars.

Compact Machine Layout
The length of the machine can be specified depending on the raw material length.

Accurate Cuts
by the short robot arm and material measurement by laser.

Intuitive Machine Operation
User friendly graphical user interface.

RPC 600 - 1200

	H	L *Optional*	L *Optional*	T *Optional*	[*Optional*	□ *Optional*
RPC 600	*max. 600 x 300 mm 23.6”x 11.8”*	*max. 590 x 200 mm 23”x 7.9”*	*max. 250 x 250 mm 10”x 10”*	*max. 500 x 200 mm 19.7”x 7.9”*	*max. 600 x 300 mm 23.6”x 11.8”*	*max. 600 x 450 mm 23.6” x 17.7”*
RPC 1200	*max. 1220 x 424 mm 48”x 16.7”*	*max. 590 x 200 mm 23”x 7.9”*	*max. 250 x 250 mm 10”x 10”*	*max. 500 x 200 mm 19.7”x 7.9”*	*max. 1220 x 424 mm 48”x 16.7”*	*max. 600 x 450 mm 23.6” x 17.7”*
Other materials:	*on request*					

Conveyors and buffer tables
allowing fully automatic material handling.

Ink or punch marking
to mark text on the flange.

A minimum need for grinding
achieved by accurate cuts and smart cutting paths.

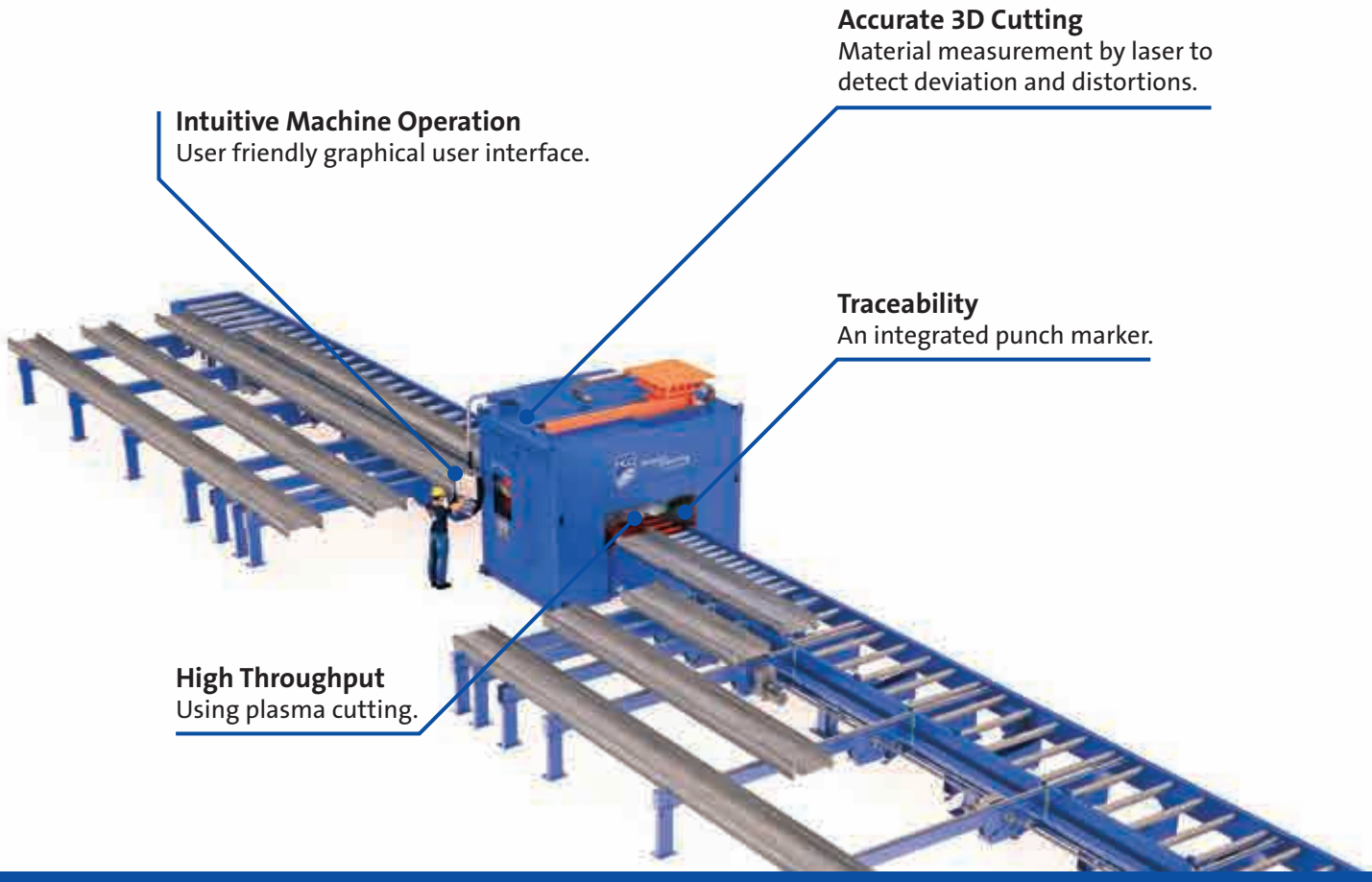
Easy design of profiling shapes
by HGG’s design software, Tekla, SolidWorks, Inventor, etc.

Compact robot arm
with high positioning accuracy.

Plasma cutting
for rapid cutting without the need of pre-heating.

Beam Profiling Line
Highly productive & accurate

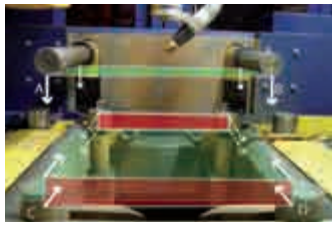
The RPC is a highly productive plasma cutting line mainly for the offshore industry, using advanced measuring systems to compensate for beam distortions.



PCL 600

	—	⌊	L	L	T	H *Optional*
PCL 600	*max. 500 mm 19.7”*	*max. 550 mm 21.7”*	*max 550 x 200 mm 21.7” x 7.9”*	*max. 200 x 200 mm 7.9” x 7.9”*	*max. 500 x 200 mm 19.7” x 7.9”*	*max. 420 x 275 mm 16.5” x 10.8”*

Edge cleaning systems
by a shot blast or brush unit for faster panel welding.



Accurate material positioning
by horizontal and vertical measurement rollers.

Magnetic cranes
for efficient loading and unloading.

Material gripper
For exact material positioning in linear direction.

Compact robot arm
moves dynamically with the gripper during plasma cutting.

Plasma cutting
to cut carbon steel, alloys and even aluminium.

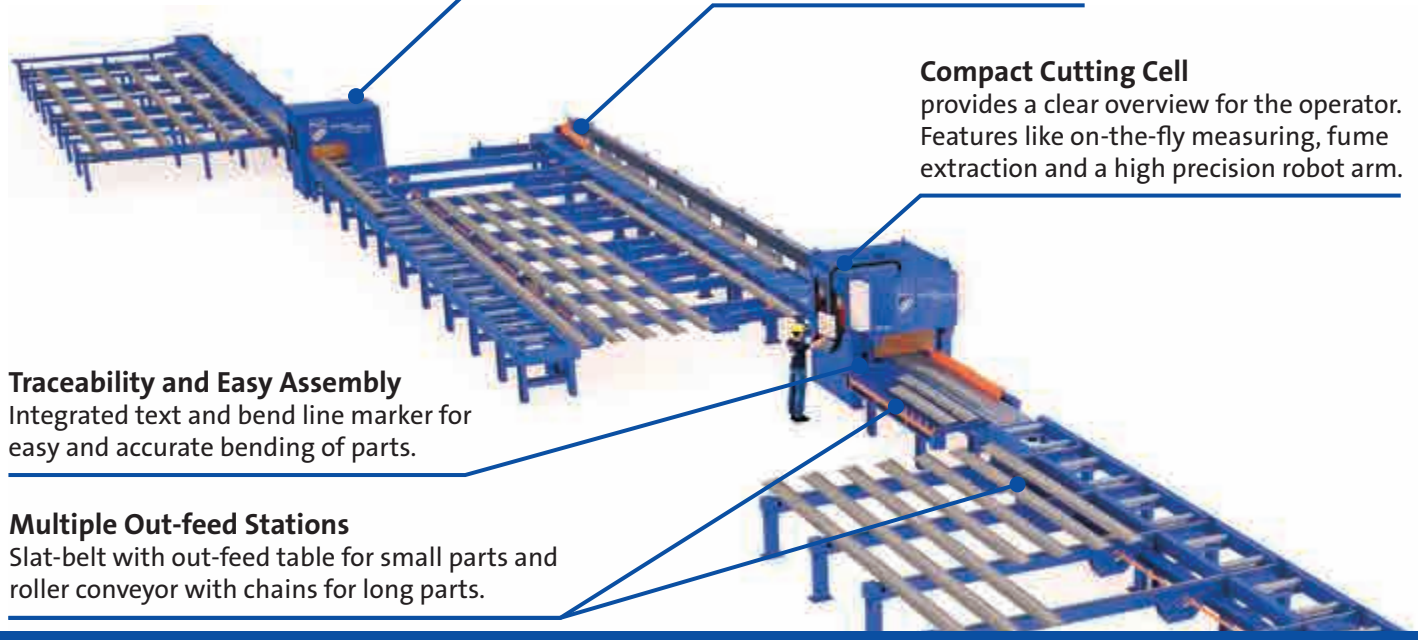
Profile Cutting Line
Highly productive & accurate

The PCL is a highly productive plasma cutting line mainly for the shipbuilding industry, using advanced motion controls to continuously measure material deviations and distortions.

Preparation For High Quality Panel Welding
Integrated edge cleaning unit.

High Throughput
On-the-fly material detection by measuring rollers and gripper.

Compact Cutting Cell
provides a clear overview for the operator. Features like on-the-fly measuring, fume extraction and a high precision robot arm.



Traceability and Easy Assembly
Integrated text and bend line marker for easy and accurate bending of parts.

Multiple Out-feed Stations
Slat-belt with out-feed table for small parts and roller conveyor with chains for long parts.

Enerflex

Enerflex, provides products, services and integrated solutions around the world, focusing on customers that process and move energy between the wellhead and the market. Its SPC 2500 pipe profiling machine cuts the pressure vessels used in these markets.

Calgary, Canada
Machine: SPC2500

"Previously, a larger pressure vessel would have been roughly 40-50 hours by hand and the machine cut that in under 4 hours!"

Mr. Kurt Schaerer – General Manager

Nurol Gulf

Nurol Gulf is a steel construction company for heavy structural steel works such as mega-hangars, airport terminal buildings, stadiums, sport facilities, warehouses, architectural facades and bridges.

Doha, Qatar
Machine: SPC 600


Mr. Adem Aladag

"Sometimes the fabrication guys cannot keep up with our speed"

Mr. Adem Aladag - Technical Office Chief Engineer

Penglai Jutal Offshore Engineering

Penglai Jutal Offshore Engineering is a global operating upstream fabricator which specialises in the fabrication of large and complex structures for the upstream industry for oil and gas, mining, desalination and energy.

Shangdong province, China
Machine: RBPC 2000

"The interface is clear. It basically takes one week to learn how to operate."

Mr Zhang Long – Procurement Manager Penglai

Welcome to our world!

Welcome to HGG, the global leader in 3D profiling solutions.

We are proud of our products and especially proud of our people, they make the difference! We are equally grateful to our customers, who give us the chance to live our passion, striving to provide the best products available. With this passion we believe that our company holds the following key elements which provide added value to you.

Software. With all software developed in-house, we provide 3D viewing and modelling tools, CADCAM connections and an intuitive machine interface.

Innovation. Continuously adding functionality to existing products combined with structured strategic product development.

Service. Building reliable machines with remote access offer the basics but having local organisation in place makes the difference.

We invite you to continue challenging us to develop leading production automation in our field of 3D profiling.

Board of directors

HGG Group

“We listen to our customers which results in a product range inspired by market needs”

Igor Gieltjes
Commercial Director - HGG

Jack Kistemaker *Mark Helder* *Marco Karman* *Igor Gieltjes*

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