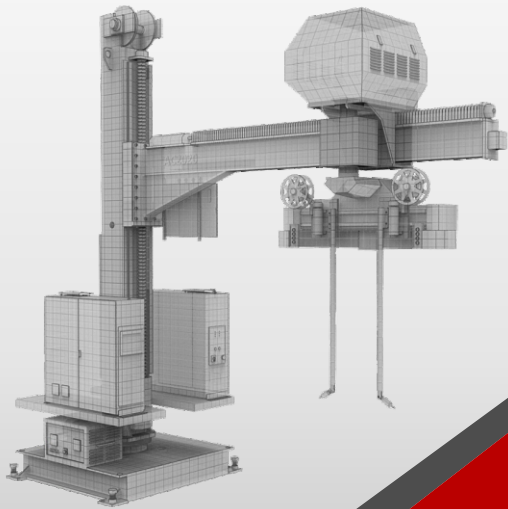




Power Electronics & Controls



PEC Rotary Head
Weld Cladding Systems 2015



PEC Ltd

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RTH-1

Key features of the Rotary Head Systems:

- ◆ Automatic Torch Centering for bores and seal areas
- ◆ Automatic Racetrack-shape BOP bores
- ◆ Automatic Racetrack-shape BOP ring-groove and flat seal areas
- ◆ Tapered bores
- ◆ TwinArc™ Option for extra productivity
- ◆ Intersecting Cross Bores in Single and TwinArc™
- ◆ Seat Pockets in Single and TwinArc™
- ◆ Bore sizes up to 1400 mm with no adaptors, extensions or turntables required
- ◆ Bespoke job shapes
- ◆ Unlimited job weight
- ◆ Simple to use interface for fast and efficient job set up
- ◆ Welding parameter and process feedback monitoring

These are some of the major benefits to the users of the PEC Rotary Head Systems:

... savings in manufacturing time

- Reduced time in centring the torch to the bore without moving the component
- Reduced welding time using PEC's unique TwinArc™ TIG process (minimum of 4" bores)
- Fast preheating of the component as there are no restrictions on the number of heating pads that can be fitted to the stationary component
- Reduced welding time - rotational speeds up to 3 rpm are possible with low mechanical wear
- Rapid relocation of the torch to other bores on the component
- Components can be pre-heated prior to setup which reduces 'dead' time

... simplifies welding of

- Very heavy components
- Components that cannot be manipulated
- Non-circular bores and surfaces
- Valves with multiple offset bores

... produces higher quality weld overlays

- Smooth and stable rotation of the weld head results in smoother welds finishes
- More consistent deposit of welds
- Lower defects due to use of more automation techniques
- Reduced risk of operator errors as many manual tasks have been eliminated
- Total automation of difficult tasks

... improves health & safety of the welder

- Operator does not have to manipulate heavy components manually
- Operator is not standing on a rotating turntable whilst attending to the job
- Silent operation

... lower installation & maintenance costs

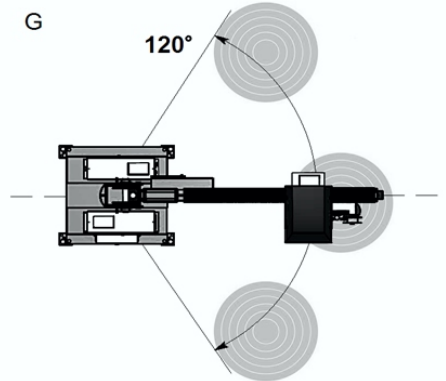
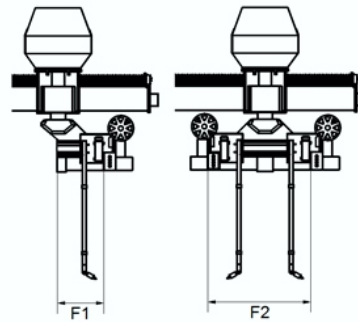
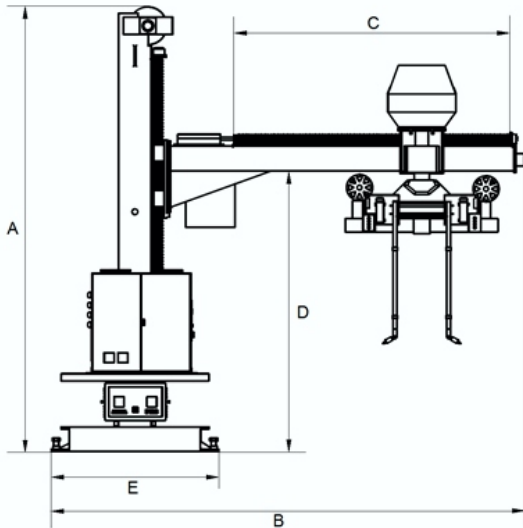
- Elimination of electrical preheat slip rings (required on turntables)
- Reduced mechanical wear in moving parts
- Reduced machine footprint means better utilisation of shop floor



RTH-2



RTH AC Systems can serve multiple work stations with electronically controlled column rotation where switching between different jobs is much easier and more convenient, drastically saving operational time.



Dimensions		A	B	C	D MAX	E	F1	F2	G
Systems	AC - 1515	4850 mm	5000 mm	1500 mm	3700 mm	1800 ² mm	450 mm	900 mm	120°
	AC - 2020	5350 mm	5500 mm	2000 mm	4200 mm	1800 ² mm	450 mm	900/1400 mm	120°
	AC - 2520	5960 mm	5500 mm	2000 mm	4700 mm	1800 ² mm	450 mm	900/1400 mm	120°

System Dimensions:

- A – Column height
- B – Boom length
- C – Boom travel distance (Y axis)
- D – Boom travel distance (X axis)
- E – Base dimensions
- F1 – Single Arc slide travel distance
- F2 – Twin Arc slide travel distance
- G – Maximum rotation angle

AC 2020



10 reasons to choose a PEC Rotary Head Weld Cladding System, please check this list before you commit to a purchase

1. More than 15 years experience with Rotary Head systems installations
2. Can weld bores up to 1400 mm diameter and 2500 mm height in one operation without using 'tricks' like 'bent' torches or mechanical extensions*
3. Reliable electrical and water/gas services - we do not use unreliable rotary unions* and rubber seals for coupling cooling water and shielding gas to the rotating welding torch
4. We use high quality precision ballscrews and guide rails on our column and booms not low accuracy rack* and pinions
5. Choice of welding processes - Unique high productivity TwinArc™ TIG & MIG capability
6. Hot wire TIG & Pulsed MIG processes running on the same system unique to PEC
7. Simultaneous NC operation in the horizontal and vertical axes for up to 2500 mm movement and 0.01 mm accuracy
8. PEC's SynerTIG™ control systems for up to 150% higher welding rates compared to competitor systems
9. A minimum of 10 years technological lifespan - our products are designed to be expanded and upgraded with any new functions developed. We have an evolutionary policy to product development and you benefit from it over time
10. High quality references available from major companies like Cameron, FMC, and GE Oil & Gas (formerly Vetco Gray) worldwide group companies

* Indicates techniques and technologies used by our competitors.





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