

### Product Description

For machining compact flanges, choose from 2 solutions:

1. Complete machines built specifically for machining compact flanges.
2. Conversion kits for a selection of our flange facing machines.

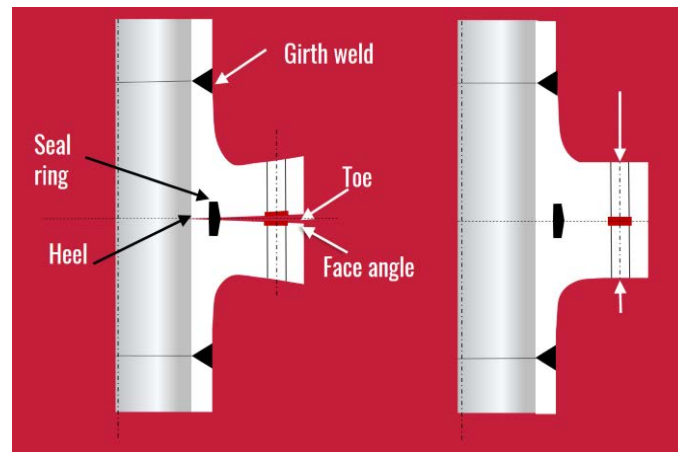
Mirage has developed a range of internally and externally mounted products for compact flange machining which can be used with an attachment for accurate machining of the taper angles specific to compact flanges. The conversion kit allows for angle adjustment of the saddle carriage assembly and contains components and tools including a digital indicator, operator manual with angle tables.

### About compact flanges

Compact Flanges are commonly used in offshore rigs and various subsea installations including; flexible and rigid risers, subsea production flowlines, Christmas trees, subsea gas-lift and water injection flowlines, subsea metering equipment, subsea, valves, pumps and compressors.

Damage can occur in during transit and other stages before final joint assembly. In these situations it is necessary to resurface the flange using a flange facing machine designed or converted compact flanges.

The machines and conversion kits on the following pages enable the accurate machining of the taper angles required within compact flanges. The conversion kit allows for a standard machine to be retro-fitted making the machining of compact flanges possible.



Complete Machines	Internally Mounted Machines				Externally Mounted Machines	
	MM860i-CF	MM1000i-CF	MM1500i-CF	MM2000i-CF	MM300E-CF	MM600E-CF
<b>Min Facing Diameter</b>	6" (153mm)	6" (153mm)	12" (305mm)	24" (610mm)	0" (0mm)	0" (0mm)
<b>Max Facing Diameter</b>	34" (864mm)	38.6" (1000mm)	60" (1525mm)	80" (2032mm)	12" (305mm)	24" (610mm)
<b>Min Clamping Diameter</b>	6" (152mm)	5.7" (145mm)	11.4" (290mm)	23.8" (604mm)	50mm (2")	12.4" (315mm)
<b>Max Clamping Diameter</b>	32" (813mm)	32" (813mm)	55" (1400mm)	72" (1830mm)	305mm (12")	21.89" (556mm)
<b>Tool Post Travel</b>	3" (76mm)	1.8" (45mm)	4" (102mm)	4" (102mm)	75mm (3")	3" (75mm)
<b>RPM (Min/Max)</b>	10 - 33	10 - 33	0 - 22	0 - 20	15 - 33	15 - 33
<b>Drive (Pneumatic @ 90psi (6 bar))</b>	2.1Hp (1.57kw)	2.2Hp (1.7kw)	4.0Hp (3.0kw)	4.0Hp (3.0kw)	0.9 Hp (0.67Kw)	4Hp (5.36Kw)
<b>Air consumption required</b>	1.9m <sup>3</sup> /min 67 cfm	1.9 m <sup>3</sup> /min 67 cfm	2.69 m <sup>3</sup> /min 98 cfm	2.69 m <sup>3</sup> /min 98 cfm	1.19m <sup>3</sup> /min 42 cfm	2.549 m <sup>3</sup> /min 90 cfm
<b>Shipping Weight</b>	440lbs (200kg)	440lbs (200kg)	1096lbs (498kg)	Box 1: 1345lbs (610kg) Box 2: 1235lbs (560kg)	198lbs (90kg)	419lbs (190kg)
<b>Shipping Dimensions</b>	33 x 23 x 30" (850 x 580 x 750mm)	33 x 24 x 28" (840 x 600 x 720mm)	48 x 32 x 33" (1230 x 820 x 830mm)	Box 1: 71x35x28" (1800 x 900 x 720mm) Box 2: 75x49x22" (1900 x 1250 x 570mm)	25 x 24 x 18" (640 x 600 x 450mm)	39 x 38 x 18" (980 x 960 x 40mm)

## Included as standard

Each machine is supplied complete with the following items:

- ✓ Digital indicator
- ✓ Angle tables
- ✓ Air lubricator
- ✓ Tool post
- ✓ Tool kit
- ✓ Storage / shipping box
- ✓ CE certificate
- ✓ Packing list and manual

## Machine Availability

Purchase  Rental

## Conversion kits for existing machines

Kits for internally  
mounted  
machines



Kits for externally  
mounted  
machines



### Existing Machine

### Part Number of conversion kit required

MM610i	<b>MM610i-CFM</b>
MM860i	<b>MM860i-CFM</b>
MM1000i	<b>MM1000i-CFM</b>
MM1500i	<b>MM1500i-CFM</b>
MM2000i	<b>MM2000i-CFM</b>
MM300e	<b>MM300e-CFM</b>
MM600e	<b>MM600e-CFM</b>

## Included as standard with conversion kits

The accessory is supplied complete with the following:

- ✓ D section / Arm
- ✓ Tool post
- ✓ Tool kit
- ✓ Bolts
- ✓ Storage / shipping box
- ✓ CE certificate
- ✓ Packing list and manual

## Operator Requirements

As these machines and kits are used for carrying out specialist machining tasks, the operator of this equipment must be:-

- Trained and conversant with the compact flange machining
- Have the ability to achieve required dimensions, with a full understanding of powered machine functions.
- Be able to identify the correct and incorrect use of static or portable machines.
- Comply with all local and internationally recognised safe use of powered machine practices.

## Kit Availability

Purchase  Rental