# COPYING CARRIAGE OPTION

To Perform Compound Bevels on Heavy Pipes

#### **Copying Carriage**



#### **DESCRIPTION**:

The copying carriage option was design to perform compound bevels for wall thicknesses over 50mm (1.968").

The use of a compound bevel provides a reduction in the amount of weld metal that needs to be deposited in the weld bead. The aim is to avoid welding operations that are too long and too costly from a labor and consumables point of view.

The Copying Carriage option is made for PROTEM beveling machines in the US40 to US450 range and PROTEM cutting and beveling machines in the TT-NG series.

Using HSS or carbide inserts allows machining on metal pipes including mild steel, chrome, stainless steel, duplex, super duplex, coppernickel alloy steel, inconel, P91, aluminium, copper, exotic alloys and more.

To implement the copying carriage system, simply remove the tool plate from the unit and fit the copying arm on the machine. This implementation is fast and easy to do. Once it has been completely equipped with its copying arm, the machine is ready to perform beveling operations

During the machining operation, the operator's safety is ensured by the safety cover which is situated over the copying arm during rotation.Reliable and accurate, the copying carriage system performs machining operations by using a copying cam. The copying cam is connected to the tool holder by a "follower finger" which provides radial movement to the carriage.

In order to guarantee that the land or root face has a constant width over the whole circumference of the pipe, a counterboring tool may be added on the copying carriage.





PROTEM

Subject to modification without prior notice Pictures are not contractual

#### **US40**

DESCRIPTION
Copying carriage stroke 65 mm
Cam for compound bevel or J-bevel (Please send a drawing)
Cam for simple bevel (Please send a drawing)

#### **US150**

ORDER NO.	DESCRIPTION
US150-KS75-30	Copying carriage, stroke 75 mm up to 30" O.D.
US150-KS75-36	Copying carriage, stroke 75 mm up to 36" O.D.
US150-KS.S	Cam for compound bevel or J-bevel (Please send a drawing)
US150-KS.S1	Cam for simple bevel (Please send a drawing)

### **US80**

ORDER NO.	DESCRIPTION
US80-KS75	Copying carriage stroke 75 mm
	Cam for compound bevel or J-bevel (Please send a drawing)
US80-KS.S1	Cam for simple bevel (Please send a drawing)

#### **US450**

ORDER NO.	DESCRIPTION	
US450-KS75	Copying carriage, for diam. 20-48"	
•	Cam for compound bevel or J-bevel (Please send a drawing)	1
US450-KS.S1	Cam for simple bevel (Please send a drawing)	



## TT-NG

ORDER NO.	DESCRIPTION
TT-KS50	Copying carriage stroke 50 mm
	Cam for compound bevel or J-bevel (Please send a drawing)
TT-KS50.S1	Cam for simple bevel (Please send a drawing)

ORDER NO.	DESCRIPTION
TT-KS100	Copying carriage stroke 100 mm
TT-KS.S100	Cam for simple bevel (Please send a drawing)

ORDER NO.	DESCRIPTION
TT-KS150	Copying carriage stroke 150 mm
TT-KS150.S	Cam for simple bevel (Please send a drawing)



