

# Klinger Packing Tools

*For best results when packing or repacking a pump or valve our installation instructions should be followed meticulously. To assist in this packing procedure we are pleased to offer a range of packing tools.*

*Flexible Packing Extractors, Packboy Packing Cutter, Packing Knives, Conversion Tables, Notes, Compatibility and Fitting Instructions.*



aerospace  
sector  
certification  
scheme

# Klinger Packing Tools

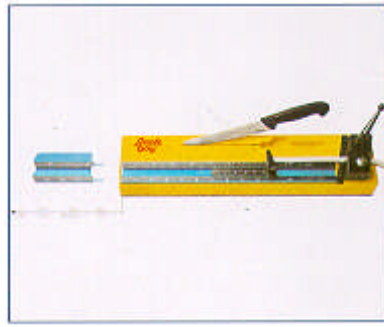


## FLEXIBLE PACKING EXTRACTORS

The total removal of gland packing from stuffing boxes without damaging the shaft or the stuffing box is important for a successful repack. Typically stuffing boxes are in awkward positions. Klinger flexible extractors make the job easier.

We offer four sizes of extractors.  
No. 1 for packing 6.5mm to 9.5mm  
No. 2 for packing 9.5mm to 12.5mm  
No. 3 for packing 12.5mm to 16mm  
No. 4 for packing over 16mm

Spare ends are available and we recommend that you retain plenty in stock.



## PACKBOY PACKING CUTTER

Correct ending to length is a must for optimum performance. The object of the PACKBOY is to:-

- Reduce friction
- Control heat generation
- Reduce power consumption
- Control wear
- Seal better
- Seal for longer
- Reduce wastage

By the provision of PACKBOY in the maintenance shop, the engineer, because his job is made easier, takes additional care in repacking... he knows he is doing the job better so he takes an extra interest in getting it right the first time.



## PACKING KNIVES

Good quality "stay sharp" knives are an essential component in the repacking process. How often is the engineer faced with cutting a new tough man made fibre with adequate equipment? What happens-the packing ends up with frayed ends and leak paths before the pump is even restarted. Short life with excess leakage is the inevitable result. There is a knife included with each PACKBOY, but additional knives are essential.

## NOTES

1. All information and recommendations contained in this publication are, to the best of our knowledge, correct. Since conditions of use are beyond our control, users must satisfy themselves that products are suitable for the intended processes and uses. No warranty is given or implied in respect of information or recommendations or that any use of products will not infringe rights belonging to other parties. In any event or occurrence, our liability is limited to our invoice value of the goods delivered by us to you. We reserve the right to change product design and properties without notice.

2. Details of pressure, temperature, speed etc..should be regarded as mutually exclusive.

A packing will most likely perform with a reduced life if the conditions of use are towards the upper limit of control of temperature, pressure and speed, in this case we would recommend that an alternative packing be sources where the upper limit of performance for at least one of the control factors is not approached.

3. Avail ability of size and pack. We are flexible in this respect in always endeavouring to supply our customer's precise needs, within reason. Our standard pack is boxes of 8 meters with a minimum size of 3.0mm and a "standard" maximum size of 32mm sq., however we have a capability up to about 40 mm sq. We will however consider any

configuration of size, length and weight against volume demands. Standard cross section available: 3mm to 25mm Standard boxed length: 8 metres and 1,2 & 4 Kgms.

4. PTFE is a resistant to chemical attack over an enormous range, however it is NOT suitable for use with molten alkali metals, fluorine and some fluorine compounds at elevated temperatures and/or pressures.  
5. Carbons and graphite packings are not recommended for use with strong oxidising agents (oleum, nitric acid, aqua regia, permanganates, etc.)

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SHAFT SPEED CONVERSION TABLE (RPM / MPS)

RPM	Shaft Diameters															
	10	15	20	25	30	40	50	60	70	80	100	125	150	200	250	300
	<i>Metres per Second</i>															
<b>100</b>	0.05	0.08	0.10	0.13	0.16	0.21	0.26	0.31	0.37	0.42	0.52	0.65	0.79	1.05	1.31	1.57
<b>300</b>	0.16	0.24	0.31	0.39	0.47	0.63	0.78	0.94	1.10	1.26	1.57	1.96	2.36	3.14	3.93	4.71
<b>500</b>	0.26	0.39	0.52	0.65	0.78	1.05	1.31	1.57	1.83	2.09	2.62	3.27	3.93	5.24	6.56	7.86
<b>1000</b>	0.52	0.79	1.05	1.31	1.57	2.09	2.62	3.14	3.66	4.19	5.24	6.55	7.86	10.50	13.00	16.00
<b>1500</b>	0.78	1.18	1.57	1.96	2.36	3.14	3.93	4.71	5.50	6.28	7.86	9.86	12.00	16.00	20.00	24.00
<b>1750</b>	0.92	1.37	1.83	2.29	2.75	3.67	4.58	5.50	6.42	7.33	9.16	11.46	14.00	19.00	23.00	27.50
<b>2000</b>	1.05	1.57	2.09	2.62	3.14	4.19	5.24	6.28	7.33	8.38	10.47	13.09	16.00	21.00	27.00	31.50
<b>2500</b>	1.31	1.96	2.62	3.27	3.93	5.24	6.55	7.86	9.16	10.47	13.09	16.37	20.00	27.00	33.00	39.30
<b>3000</b>	1.57	2.36	3.14	3.92	4.71	6.28	7.86	9.43	11.00	12.57	15.71	19.64	24.00	32.00	-	-
<b>3600</b>	1.89	2.83	3.77	4.71	5.66	7.54	9.43	11.31	13.20	15.08	18.85	23.57	29.00	-	-	-
<b>4000</b>	2.09	3.14	4.19	5.24	6.28	8.38	10.47	12.57	14.66	16.76	20.95	26.19	-	-	-	-
<b>4500</b>	2.36	3.53	4.71	5.89	7.07	9.43	11.78	14.14	16.50	18.85	23.57	29.46	-	-	-	-
<b>5000</b>	2.62	3.93	5.24	6.55	7.86	10.47	13.09	15.71	18.33	20.95	26.19	32.73	-	-	-	-

**RPM = Revolution per Minute**

