

# PACK-FLEX

## SPECIAL PACKING FOR VALVES AND PUMPS



# COMPRESSION PACKINGS MANUFACTURING

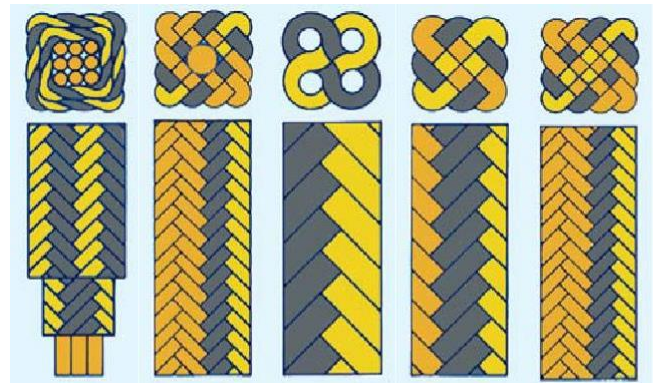
## BRAIDING CONSTRUCTION

### Braid over braid

The braiding machine makes cylindrical layers of yarn. The exact size is reached with braiding layers one over the other, using 12 and 16 shuttle braiding machines.

### Braid over a core

The final product is made through braiding one or more layers of yarn over the core. The core may be extruded, twisted, or braided. The construction may be attained both on circuit and diagonally braiding machines.



BRAID OVER BRAID

BRAID OVER CORE

DIAGONALLY BRAIDED

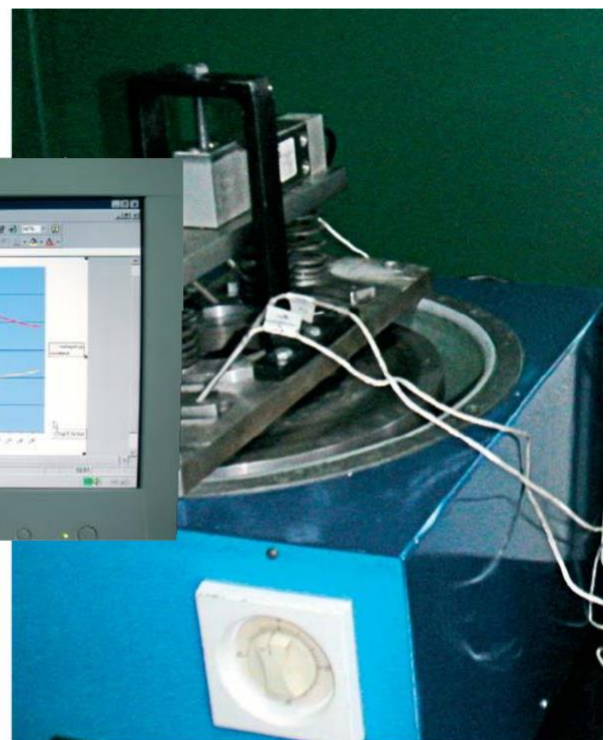
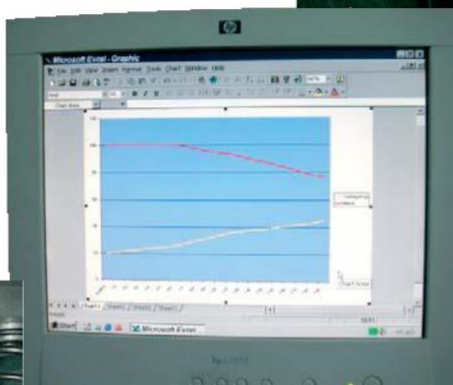
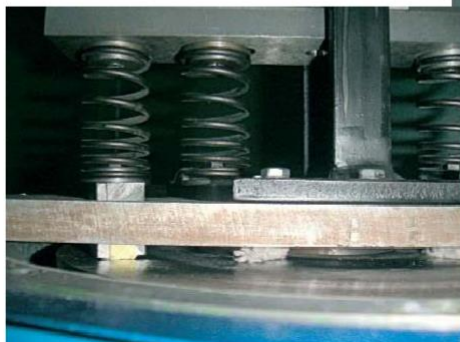
### Diagonally braided

Every fiber is fixed by the others, forming thick, united structure, which cannot unbraid or break down while working. There are not separate layers, which wear out one by one, nor the braid is loosened. The diagonally braided packings have more regular density, which is an opportunity for better lubricants' retention. Thus the produced packing is solid and flexible. Such packings are suitable for centrifugal and piston pumps, mixers, valves, compensators, etc.

## TESTS AND CONTROL

The tests for reliability are conducted through control of the heat released at the contact surface with the shaft. Also, packings are judged according to the wear out they undergo at different shaft speeds and stiffness. Other parameters give informa-

decisions when making a choice or selection of high-quality yarns, lubricants, inhibitors and packings construction.





## PACK-FLEX - STUFFING BOX PACKING



Type of packing <b>PACK-FLEX</b>	Composition		P (bar)		
	Material	Impregnation	⊗	⊠	⊞
<b>2006 FDA</b>	PTFE	lubricant	30	30	250
<b>2005 FDA</b>	PTFE		30	30	250
<b>2011</b>	PTFE / graphite	lubricant	30	80	200
<b>2011G</b>	PTFE / graphite	lubricant	30	100	250
<b>0112</b>	aramid	PTFE / lubricant	35	200	250
<b>0112P</b>	staple aramid	PTFE / lubricant	20	80	150
<b>0112M</b>	m-aramid	PTFE / lubricant	25	50	100
<b>0212</b>	PTFE / graphite / aramid	lubricant	30	250	250
<b>0312</b>	PTFE / aramid	lubricant	30	100	200
<b>0113</b>	carbon fibres	lubricant	30	50	200
<b>0213</b>	carbonised fibres	PTFE	30	50	200
<b>2013</b>	exp. graphite		30	200	500
<b>3113</b>	exp. graphite / carbon		35	250	400
<b>6013</b>	exp. graphite / ceramic				
<b>0014</b>	cotton	PTFE / lubricant	25	25	40
<b>0114</b>	ramie	PTFE / lubricant	20	100	100
<b>0214</b>	cotton	lubricant	20	8	40
<b>0214G</b>	cotton	graphite / lubricant	20	8	40
<b>0215</b>	glass				
<b>0215H</b>	glass	special silicate system			
<b>1315</b>	glass	PTFE / graphite	20	40	60
<b>2015</b>	glass	PTFE	20	40	60
<b>3015</b>	glass	graphite			200
<b>0216</b>	ceramic				
<b>2017</b>	Acrylic	PTFE	20	20	50
<b>3017</b>	Novoloid	PTFE / lubricant	25	25	80

# SELECTION CHART FOR VALVES AND PUMPS - TECHNICAL PARAMETERS AND APPLICATIONS

T (°C)		V (m/s)	pH	Density (g/cm <sup>3</sup> )	Media																			
					Industrial and refuse waters	Sea water	Water : pharmaceuticals and food products	Steam	Superheated steam	Concentrated acids	Diluted acids	Concentrated lyes	Diluted lyes	Solvents	Air, dry industrial	Acid gas	Inert gases	Oxygen	Oils and grease	Synthetic oils	Paints and varnish	Adhesive viscoses media and	Abrasive media	
200	280	18	0-14	1.6	●	●	-	●	-	●	●	●	●	●	●	●	●	●	-	●	●	●		●●
200	280	18	0-14	1.5	●	●	●	●	-	●	●	●	●	●	●	●	●	●	●	●	●	●		●●
100	280	25	0-14	1.5	●	●	-	●	-	●	●	●	●	●	●	●	●	●	-	●	●		●●●●	
100	280	25	0-14	1.65	●	●	●	●	-	●	●	●	●	●	●	●	●	●	-	●	●	●		●●
100	280	15	2-12	1.35	●	●	-	●	-	●●		●	●	●	●	●	●	-	●	●	●	●	●	●
100	280	15	2-12	1.4	●	●	-	●	-	●	●	●	●	●	●	●	●	-	●	●	●	●	●	●
50	280	20	1-13	1.35	●	●	●	●	-	●●		●●	●●	●		●	●	●	-	●●		●	●	●
150	280	25	1-13	1.5	●	●	-	●	-	●	●	●	●	●	●	●	●	-	●	●	●	●	●	●
100	280	25	2-12	1.45	●	●	-	●	-	●	●	●	●	●	●	●	●	-	●	●	●	●	●	●
60	400	20	1-14	1.1	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●		●●
60	300	20	2-14	1.2	●	●	-	●	-	-	●	●	●	●	●	●	●	-	●	●		●	●	●
240	650	50	1-14	1.1-1.3	●	●	-	●	●	●	●	●	●	●	●	●	●	-	●	●	●	●		●●
240	650	20	0-14	1.0	●	●	-	●	●		●	●	●	●	●	●	●	-	●	●	●	●	-	●
	650		4-12	0.9	●	●	-	●	●	-	●	●●	●		●	●	●	-	●	●	●	●	-	-
50	140	12	5-11	1.2	●	●	●	-	-	-	●	-		●●	●	●	●	-	●	●	-	-	●	●
50	140	12	5-11	1.3	●	●	●	-	-	-	●	●●	●		●	●	●	-	●	●	-	-	●	●
	120	10	5-9	1.0	●	●	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
	120	10	5-9	1.1	●	●	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
	500		6-11	0.9	-	-	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
	700		5-11	0.9	-	-	-	●	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
50	280	15	2-12	1.8	●	●	-	●	-	-	●	-		●●	●	-	●	-	●	-	-	-	-	-
50	280	12	2-12	1.9	●	●	-	●	-	-	●	-		●●	●	-	●	-	●	-	-	-	-	-
	550	1.5	5-11	1.4	-	-	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
	900		5-11	0.65	-	-	-	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-
50	200	10	2-12	1.3	●	●	-	●	-	-	●	●●	●		●	●	●	-	●	●	-		●●	
50	250	10	1-13	1.3	●	●	-	●	-	●	●	●	●	●	●	●	●	-	●	●	●	●	●	●