



HELICAL AND BEVEL-HELICAL UNITS





## General information

**Reggiana Riduttori** helical and bevel-helical units are suitable for most applications in both horizontal and vertical drives.

The new design and outstanding innovations offer:

- *increased performance*
- *more sizes*
- *more competitiveness with the same high reliability*

The high power to weight ratio of all units, combined with low volume, enables perfect installation in the most critical situations.

New concepts have been used to improve the noise level in a consistent way, by grinding all gears sets, both the helical and the Gleason spiral bevel type gears.

To obtain **higher performance**, particular consideration has been given to efficiency and housing surface area to guarantee a convenient heat dissipation in most cases.

When necessary, units can be supplied with:

- *fan(s) fitted to high speed shafts*
- *cooling water coil*
- *fan and coil together*
- *external oil cooling system*

### GEAR CASES

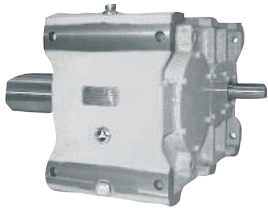
Rigid close grained grey cast iron construction up to size 90. Fabricated steel cases are available as standard from size 120 up and as optional for smaller sizes.

### GEARS

High quality alloy case hardening materials provide long life, wear resistance and fatigue strength. Helical and spiral bevel gears (usually) are ground to high standards and quiet running characteristics. Life and wear calculations (**25.000 hrs** with  $f_m=1$ ) based on ISO 6336 recommendations.



# Products



HELICAL UNITS

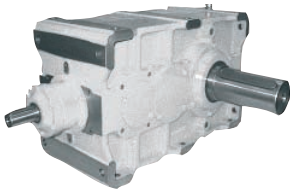
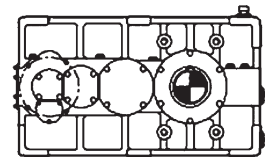
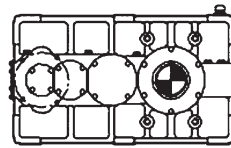
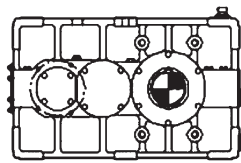
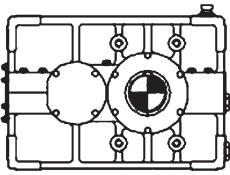
SERIES **P**

**PA**  
single reduction

**PB**  
double reduction

**PC**  
triple reduction

**PD**  
quadruple reduction



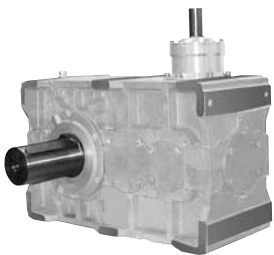
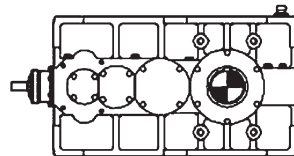
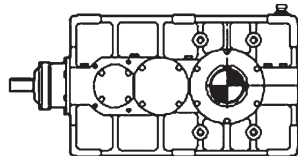
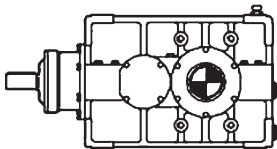
BEVEL-HELICAL UNITS

SERIES **RH**

**RHB**  
double reduction

**RHC**  
triple reduction

**RHD**  
quadruple reduction



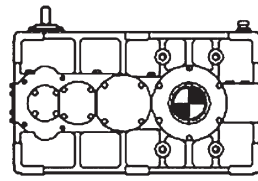
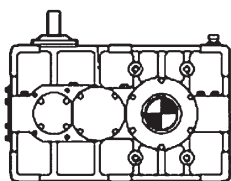
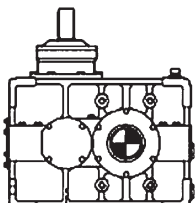
BEVEL-HELICAL UNITS

SERIES **RV**

**RVB**  
double reduction

**RVC**  
triple reduction

**RVD**  
quadruple reduction





# Applications

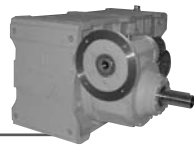
LIFTING FISHING NETS



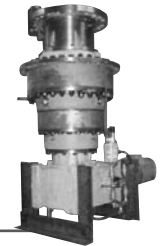
LIFTING CRANES/BRIDGE CRANES



LIFTING WITH DIFFERENTIAL



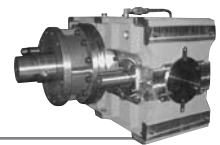
CHAIR LIFTS



EXTRUDERS



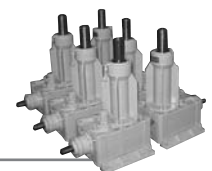
STEEL WORKS



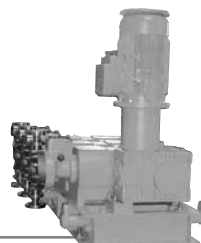
CUTTING LINES



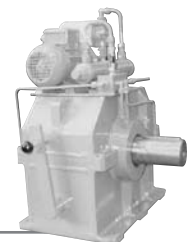
COOLING TOWERS



PUMPS



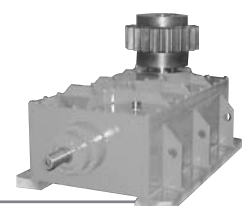
TEST BENCH



CONVEYOR BELT



LADLE TURRET













**R SERIES**

**BEVEL-HELICAL UNITS  
NOMINAL POWER RATING (kW)**

**Size**

**RHD  
RVD**

$i_N$	$n_1$ $n_2$		Size															
	min <sup>-1</sup>		10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160
<b>80</b>	1500	18.8	7.9		16									339	506			
	1000	12.5	5.4		11									230	344			
	750	9.4	4.2		8.1									175	261			
<b>90</b>	1500	16.7	7.2	9.7	14	19	28	39	56	78	111	155	228	319	447	635	895	1236
	1000	11	4.8	6.6	9.4	13	19	27	38	53	75	106	155	217	304	432	608	840
	750	8.3	3.7	5.1	7.1	10	15	20	29	41	57	80	118	165	231	328	463	639
<b>100</b>	1500	15	6.2	8.4	12	17	25	35	49	69	98	136	200	281	391	556	787	1083
	1000	10	4.3	5.7	8.3	11	17	24	33	47	66	92	136	191	265	378	534	736
	750	7.5	3.2	4.4	6.3	8.7	13	18	25	35	50	70	103	145	202	287	407	560
<b>112</b>	1500	13.4	5.8	8	11	16	22	30	46	64	91	127	187	246	365	518	736	1010
	1000	8.9	4	5.3	7.7	11	15	21	31	44	62	86	127	167	248	352	500	686
	750	6.7	3	4.1	5.9	8.1	11	16	23	33	47	65	96	126	188	267	379	520
<b>125</b>	1500	12	5	6.9	9.9	15	20	28	40	55	79	118	162	230	316	449	640	874
	1000	8	3.4	4.7	6.8	9.9	14	19	27	38	54	80	110	156	215	305	435	594
	750	6	2.6	3.5	5.1	7.4	10	15	20	28	41	61	83	117	161	229	327	447
<b>140</b>	1500	10.7	4.6	6.3	9.3	13	19	24	37	51	74	102	150	198	293	415	595	811
	1000	7.1	3.1	4.3	6.3	8.5	13	17	25	35	50	69	102	134	199	282	404	550
	750	5.4	2.4	3.2	4.7	6.4	10	12	19	26	38	52	76	100	149	211	303	412
<b>160</b>	1500	9.4	4	5.4	7.9	12	16	23	31	44	63	94	127	183	249	353	509	689
	1000	6.3	2.6	3.6	5.3	7.9	11	15	21	29	42	63	86	123	167	237	342	463
	750	4.7	2	2.7	4	5.9	8	11	16	22	32	48	64	92	125	178	257	347
<b>180</b>	1500	8.3	3.6	5	7.3	10	15	21	28	40	58	79	117	168	228	322	468	631
	1000	5.6	2.4	3.3	4.9	6.6	9.8	14	19	27	39	53	78	113	152	216	313	422
	750	4.2	1.8	2.5	3.7	4.9	7.3	10	14	20	29	40	59	85	114	162	235	317
<b>200</b>	1500	7.5	3.3	4.5	6.7	8.9	13	17	26	36	53	72	106	140	207	294	428	574
	1000	5	2.2	3	4.4	5.9	8.8	12	17	24	35	48	71	94	138	196	285	383
	750	3.8	1.6	2.2	3.3	4.5	6.6	8.7	13	18	27	36	53	70	104	147	214	287
<b>225</b>	1500	6.7	2.8	3.9	5.7	7.7	11	16	22	33	47	62	92	131	179	254	363	491
	1000	4.5	1.9	2.6	3.8	5.1	7.6	11	15	22	31	42	61	88	119	169	242	327
	750	3.3	1.4	1.9	2.8	3.8	5.7	8.1	11	16	23	31	46	66	89	127	181	246
<b>250</b>	1500	6	2.6	3.6	5.2	7	10	15	20	29	40	57	84	121	164	232	334	450
	1000	4	1.7	2.4	3.5	4.7	7	10	14	19	26	38	56	81	109	155	222	300
	750	3	1.3	1.8	2.6	3.5	5.2	7.5	10	14	20	29	42	60	82	116	167	225
<b>280</b>	1500	5.4	2.4	3.2	4.8	6.4	10	12	19	26	36	52	77	101	149	212	306	410
	1000	3.6	1.6	2.2	3.2	4.3	6.4	8.3	12	17	24	35	51	67	100	141	204	273
	750	2.7	1.2	1.6	2.4	3.2	4.8	6.2	9.3	13	18	26	38	51	75	106	153	205
<b>315</b>	1500	4.8	2.1	2.9	3.9	5.8	8.7	11	17	24	33	47	62	92	135	192	252	372
	1000	3.2	1.4	2	2.6	3.9	5.8	7.6	11	16	22	31	42	61	90	128	168	248
	750	2.4	1.1	1.5	2	2.9	4.3	5.7	8.5	12	16	24	31	46	68	96	126	186
<b>355</b>	1500	4.2	1.9	2.6	3.6	5.2	7.7	10	15	19	29	42	56				173	
	1000	2.8	1.3	1.8	2.4	3.5	5.1	6.8	10	13	20	28	37				115	
	750	2.1	1	1.3	1.8	2.6	3.8	5.1	7.5	9.5	15	21	28				86	
<b>400</b>	1500	3.8							13		26	37						
	1000	2.5							8.9		18	25						
	750	1.9							6.7		13	19						







**R SERIES** BEVEL-HELICAL UNITS  
OUTPUT TORQUES TN<sub>2</sub> (Nm)

Size

$i_n$	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	
<b>RHB RVB</b>	5	2400	3400	4800	6700	9200	12300	18200	25800	38100	54500	74800					
	5.6	2500	3600	5100	7200	9800	14000	19400	27600	40800	58300	85400					
	6.3	2900	4200	5900	8300	11200	16000	22400	31900	47100	67200	91500					
	7.1	3400	4900	6300	9000	13000	17200	26100	37200	50700	78300	105800					
	8	3600	4900	7200	10100	14000	19900	28400	40200	57500	81300	114000					
	9	3500	4700	6900	9700	13300	19300	27700	38900	55500	78500	106400					
	10	3000	4000	6700	9300	11500	15700	22400	31700	53200	75400	91600					
	11.2	2700	3500	4800	6800	10000	13700	19600	27700	38400	54100	80000					
	12.5	2500	3600	5000	7100	9400	13500	19000	27200	40100	56600	74500					
	14	3000	4300	5400	7700	11100	16000	22700	32500	47800	61700	88000					
	16	3200	4200	5900	8300	11700	16800	24000	34000	47400	66700	92500					
	18	2700	3500	4900	6900	10200	14100	20100	28200	39300	55300	91800					
<b>RHC RVC</b>	20	3500	4800	6800	9700	13900	19400	27700	38700	55300	78300	110800	157300	221400	313500		
	22.5	3500	4800	6800	9700	13900	19500	27800	39000	55700	78800	111700	157300	222500	315600		
	25	3500	4800	6800	9800	14000	19600	28000	39100	55900	79200	112100	159400	224500	316600		
	28	3600	4900	6900	9900	14100	19700	28100	39400	56300	79800	112900	159400	225600	318700		
	31.5	3600	4900	6900	9900	14200	19900	28400	39600	56700	80100	113400	160400	226600	320800		
	35.5	3600	4900	6900	10000	14200	20000	28500	39900	56900	80800	113900	161400	227600	322800		
	40	3600	5000	7000	10000	14400	20000	28600	40100	57200	81100	115100	162500	228700	324900		
	45	3600	5000	7000	10100	14500	20100	28800	40400	57400	81500	115600	163500	229700	325900		
	50	3700	5000	7200	10100	14500	20300	29100	40700	58200	82200	116400	164500	231800	329100		
	56	3700	5100	7200	10200	14600	20400	29000	40800	58400	82500	116900	164500	232800	330100		
	63	3700	5100	7200	10200	14700	20600	29300	41000	58700	82900	117400	166600	234900	332200		
	71	3700	5100	7300	10300	14800	20700	29600	41200	59000	83300	118100	167600	235900	333200		
	80		5100		10400	14800	20800	29700	41400	59300	83700	118800			335300		
	90																
	100																
<b>RHD RVD</b>	80	3800		7400									168300	236800		473500	660700
	90	3800	5200	7400	10300	14900	20800	29800	41700	59600	84500	119200	168800	238800	337100	476600	665900
	100	3800	5200	7500	10400	14900	20900	30000	42000	59900	85000	120000	169900	239800	338100	479600	669800
	112	3800	5200	7500	10500	15000	21000	30000	42000	59900	85000	120000	170000	240000	340000	480000	669500
	125	3800	5200	7500	10500	15000	21000	30000	42000	59900	85000	120000	169900	240000	339900	479400	669500
	140	3800	5200	7500	10400	15000	21000	30000	42000	59900	85000	120000	170000	240000	340000	479400	669700
	160	3800	5200	7500	10500	15000	21000	30000	42000	59900	85000	120000	169800	240000	339900	479000	670000
	180	3800	5200	7500	10500	15000	21000	30000	42000	59800	85000	120000	169600	240000	340000	479000	669800
	200	3800	5200	7500	10500	15000	21000	30000	42000	59900	85000	120000	170000	240000	339400	480000	670000
	225	3800	5200	7500	10500	15000	21000	30000	42000	60000	85000	120000	170000	240000	340000	480000	670000
	250	3800	5200	7500	10500	15000	21000	30000	42000	60000	85000	120000	170000	240000	340000	480000	670000
	280	3800	5200	7500	10500	15000	21000	30000	42000	60000	85000	120000	170000	240000	340000	480000	670000
	315	3800	5200	7500	10500	15000	21000	30000	42000	60000	85000	120000	170000	240000	340000	480000	670000
	355	3800	5200	7500	10500	15000	21000	30000	42000	60000	85000	120000			340000		
	400							30000		60000	85000						





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