

Welcome to the twenty-first edition of the Turolla quarterly Newsletter. As we approach the year-end, an update is in place regarding our organization and our latest product releases – both vital pillars in our on-going efforts to ensure a dynamic and competitive platform in the market place.

Therefore, in this edition you will find the latest news from our organisation and a highlight concerning our new silent pump, *shhark*®. The latter, to emphasize the benefits that this new technical solution brings to the market.

Finally, as always, your valuable feedback is very much appreciated and welcomed – because your opinion matters!

So, for the next five “reading-minutes” – enjoy!

Best regards, Ulrik Krag - Manager Partner Companies Europe

New Marketing Manager

In our efforts to support the growth path Turolla is following, we are happy to welcome Mr. Giacomo Fragassi as our new Global Marketing Manager.



Mr. Giacomo Fragassi

Before joining Turolla, Mr. Fragassi held several positions in the Advertising Industry, most recently responsible for Marketing & Business Development.

His main areas of responsibility, will be ensuring our Corporate Identity and Brand through a full-born marketing strategy execution, reflecting the growth perspective set for the company.

He holds a postgraduate Marketing Management degree from the Cambridge Marketing College in United Kingdom.

During the coming months Mr. Fragassi will look into our current set-up as well as our approach to the market.

Mr. Fragassi will be working from our new facility in Castel San Pietro, Italy.

Turolla *shhark*® low noise pump

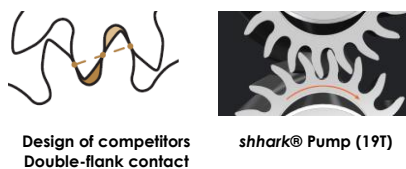
Already now we have received a great deal of positive feedback from the market regarding our new low noise *shhark*® pump.

Specifically, the technology behind this should be highlighted, since the reduction of flow pulsation is reduced significantly.



Along with almost twice the amount of teeth the tooth profile and helical angle ensure both a smooth flow characteristic and an improved flow performance, compared to standard gear pumps.

When looking at the design of similar silent pumps from our competitors, which use the double-flank contact technology, the clear advantage of the special *shhark*® design is characterized by keeping the same low noise level over time.



Because external gear units often work at high pressure with a high level of contaminants in the hydraulic fluid, the effectiveness of the double-flank contact design is very likely to decrease over time due to wear.

shhark® low noise pump - continued

In contrast, the low noise performance of *shhark*® does not rely on any short-lived solutions, like double-flank contact, because the reduction of flow pulsation is achieved through the increased number of teeth.

Therefore, the noise performance of *shhark*® remains constant throughout the pump's life.



For more detailed information of the Turolla *shhark*® low noise pump, please consult our homepage for the technical catalogue:

www.turollaocg.com/download

Technical Data							
Frame size		8,0	011	014	017	019	022
Displacement	cm ³ /rev [in ³ /rev]	8,7 [0,53]	11,1 [0,68]	14,8 [0,90]	17,3 [1,06]	19,8 [1,21]	23,5 [1,43]
SHHP2NN							
Peak pressure	bar [psi]	280 [4060]	280 [4060]	280 [4060]	280 [4060]	260 [3770]	230 [3335]
Rated pressure		250 [3625]	250 [3625]	250 [3625]	250 [3625]	240 [3480]	210 [3045]
Minimum speed at 0-100 bar		600	500	500	500	500	500
Minimum speed at 100-180 bar		1000	800	750	750	700	700
Min. speed at 180 bar to rated pressure		1400	1200	1000	1000	1000	800
Maximum speed		4000	4000	3500	3000	3000	3000

6,0 and 025 frame size are available upon request

1 kg/m³ - 23,26 lb/ft³

SHHP2							
Frame size		8,0	011	014	017	019	022
Weight	Kg [lb]	2,5 [5,5]	2,7 [5,8]	2,9 [6,3]	3,0 [6,5]	3,1 [6,7]	3,2 [7,0]
Moment of inertia of rotating components	x 10 ⁶ kgm ² [x 10 ⁶ lb-ft ²]	32,4 [769]	38,4 [911]	47,3 [1122]	53,3 [1265]	59,2 [1405]	68,1 [1616]
Theoretical flow at maximum speed	l/min [US gal/min]	34,8 [9,2]	44,4 [11,7]	51,8 [13,7]	51,9 [13,7]	59,4 [15,7]	70,5 [18,6]

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