

## Sealmatic Mechanical Seals At 18000 RPM


### For Sundyne Pump HMP 3512 For Ammonia Plant

The materials employed in the Ammonia plant need to be capable of coping with the large array of media, many of them explosive or toxic and others which could become when mixed. An increased awareness of environmental risks calls for a maximum reliability and operational safety, especially from sealing systems.

For stringent operating parameters, especially rpm as high as 18000, Sealmatic recently achieved a remarkable milestone by successfully testing the type S400 mechanical seal on the Sundyne pump HMP series for Ammonia plant. This groundbreaking accomplishment is the first of its kind in India and signifies a leap forward in the field. The testing process, meticulously conducted in-house, showcased the engineering prowess of the Sealmatic team. Operating at an impressive 18,000 rpm with a pressure of 47 kg/cm<sup>2</sup>. The type S400 mechanical seal not only met but exceeded expectations, setting a new standard for performance in the mechanical seal industry.

What sets this achievement apart is not just the successful testing of the S400 but the fact that it was accomplished at the challenging speed of 18,000 rpm. This noteworthy accomplishment is a result of meticulous planning, precision engineering and the unwavering commitment of Sealmatic to deliver cutting-edge solutions to its customers. The success of this endeavour is a testament to the dedication, expertise of Sealmatic's engineering team. As the company continues to innovate, this achievement positions Sealmatic as a key player in advancing mechanical seal technology on a global scale.



Operating Parameters Of Mechanical Seal Type S400 For Ammonia Plant								
Sr. No	Seal Type	RPM	Equipment	Media	Temperature (°C)	Stuffing Box Pressure (kg/cm <sup>2</sup> )	Suction Pressure (kg/cm <sup>2</sup> )	Discharge Pressure (kg/cm <sup>2</sup> )
1	S400	18,000	Sundyne Pump HMP - 3512	Ammonia Salt Solution (47% Ammonia, 28-30% CO <sub>2</sub> , Balance-water)	130°C	47 kg/cm <sup>2</sup>	25 kg/cm <sup>2</sup>	70 kg/cm <sup>2</sup>

Against this background, the sealing systems employed in applications involving what are in many cases explosive, toxic or aggressive media must ensure optimum tightness. On the other hand, they should also help optimize processes and thus be of advantage where the economic aspects are concerned as well. From non-critical sealing points – for which standard solutions are deployed – right through to highly complex system solutions required where particularly difficult operating conditions are concerned.

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SPEC Q1 . API .ISO 9001:2015 . EU 1935:2004 . ATEX - 2014/34/EU . ISO 9001:2015 . ISO 14001:2015 .BS-OHSAS 18001:2007 . PED-CE

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