

## References

- 1- STEPHAN, (2013), Stephan Drum Discharging Systems, available at: [www.stephan-machinery.com](http://www.stephan-machinery.com).
- 2- NSK Group, (2008), NSK Linear Guide Ball Screws Mono carrier, first edition, japan, available at: [www.NSK.com](http://www.NSK.com).
- 3- JACQUES, C, P, (2005), Tutorial centrifugal pump systems, Quebec Canada, available at: [www.Lightmypump.com](http://www.Lightmypump.com).
- 4- MUKESH SAHDEV, 2007, Centrifugal pumps: Basics Concepts of Operation, Maintenance and Troubleshooting, Part 1,
- 5- SKF GROUP, (2016), SKF rolling bearing catalogue, available at: [www.SKF.com](http://www.SKF.com).
- 6- FLOYD, T, L, (1987), Electric Circuits Fundamentals, Sixth edition, New Jersey.
- 7- JACK, H, (2007), Automation Manufacturing System with PLC, Version 5.0.
- 8- WESTAWAY, C, R, and LOOMIS, A, W, (1926), Cameron hydraulic data, Sixteen edition.
- 9- AUSTIN HUGHES, 1990, Electric Motors and Drives, third edition, Burlington.
- 10- FLOYD, T, L, Electronic Devices, Ninth edition, New Jersey.
- 11- LEV NELIK, 1999, Centrifugal and rotary pumps, united states of America.
- 12- SRINIVAS MEDIDA, 2007, Pocket Guide On industrial Automation, first edition.