

## SUMMARY

Graduation work consists of 92 pages and include 17 pictures, 2 tables, 4 posters A1.

The aim of the diploma project is to study the work of injection molding machines.

To achieve this goal decided the following key objectives: analytical review of industrial robots and their drives, power calculation and engine option, examined dynamic properties by modeling.

Calculation and realization of the diploma project were provided by the use of the following programs: MATLAB R2009b, Microsoft Office Word 2010, Microsoft Office Visio 2003, Mathcad 14, MathType.

**SERVOMOTOR, INDUCTION MOTOR , FREQUENCY CONVERTERS, MOMENTS OF INERTIA, TRANSITION, VECTOR CONTROL.**

|                   |                       |                 |              |             |   |  |  |  |                              |            |              |
|-------------------|-----------------------|-----------------|--------------|-------------|---|--|--|--|------------------------------|------------|--------------|
|                   |                       |                 |              |             | 6.050702.2219.029.БР                              |  |  |  |                              |            |              |
| <i>Chan</i>       | <i>Sh.</i>            | <i>№ docum.</i> | <i>Sign.</i> | <i>Date</i> | The electrical drive of injection molding machine |  |  |  |                              |            |              |
| <i>Designed</i>   | <i>Solomakha Y.M.</i> |                 |              |             |   |  |  |  | <i>Liter.</i>                | <i>Sh.</i> | <i>Pages</i> |
| <i>Checked</i>    | <i>Pyzhov V.M.</i>    |                 |              |             |   |  |  |  | 7                            | 92         |              |
| <i>Reader</i>     |                       |                 |              |             |   |  |  |  | NTUU «KPI», FEPEA, gr. ED-22 |            |              |
| <i>R. control</i> | <i>Теряев В.И.</i>    |                 |              |             |   |  |  |  |                              |            |              |
| <i>Approve</i>    | <i>Peresada S.M.</i>  |                 |              |             |   |  |  |  |                              |            |              |