

ISO 12164-5:2023-10 (E)

Hollow taper interface with flange contact surface - Part 5: Shanks of types AS, CS and ES

| Contents | | Page |
|---|---|-------------|
| Foreword | | iv |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Hollow taper shanks, types and dimensions | 1 |
| 4.1 | General | 1 |
| 4.2 | Hollow taper shanks of type AS | 2 |
| 4.2.1 | General | 2 |
| 4.2.2 | Balancing measures at the HSK-AS taper shank flange | 8 |
| 4.3 | Hollow taper shank of type CS | 23 |
| 4.3.1 | General | 23 |
| 4.3.2 | Basic dimensions | 23 |
| 4.4 | Hollow taper shank of type ES | 26 |
| 4.5 | Dimensions | 27 |
| 5 | Balancing | 32 |
| 5.1 | General | 32 |
| 5.2 | Fine balancing of HSK-AS and HSK-CS | 32 |
| 6 | Design | 33 |
| 6.1 | HSK sizes and types | 33 |
| 6.2 | Medium-transfer unit | 33 |
| 6.3 | Clamping forces | 33 |
| 6.4 | Material and heat treatment | 33 |
| 7 | Designation | 33 |
| Annex A (informative) Clamping forces for shanks of types AS, CS and ES | | 34 |
| Annex B (informative) Hollow taper shanks of type CS with medium-transfer unit | | 35 |
| Annex C (informative) Balancing measures and tool handling equipment | | 36 |
| Annex D (informative) Overview of all different types of shanks | | 37 |
| Bibliography | | 38 |