

List of Symbols and Abbreviations

| | |
|---------------|---|
| mm | Millimeter |
| AP | Armour Piercing |
| MPa | Mega Pascal |
| E | Energy absorbed |
| V | Volume of material participating in energy absorption |
| ASB | Adiabatic Shear Band |
| KE | Kinetic Energy |
| AA | Aluminium alloy |
| AAAV | Advanced amphibious assault vehicle |
| RHA | Rolled homogeneous armour |
| L | Longitudinal |
| LT | Long transverse |
| ST | Short transverse |
| SHPB | Split-Hopkinson pressure bar |
| UA | Under-aged |
| PA | Peak-aged |
| OA | Over-aged |
| DSC | Differential scanning calorimetry |
| OM | Optical microscopy |
| SEM | Scanning electron microscopy |
| EPMA | Electron probe micro analyser |
| XRD | X-ray diffraction |
| μ | Micron |
| ODF | Orientation Distribution Function |
| ε | Strain |
| σ | Stress |

| | |
|------------------------------|--------------------------------------|
| σ_{YS} | Yield strength |
| σ_{UTS} | Ultimate tensile strength |
| SFE | Stacking fault energy |
| $\varphi_1, \Phi, \varphi_2$ | Euler angles |
| VHN | Vickers hardness number |
| ° | Degree |
| CVN | Charpy V-notch |
| n | Work hardening exponent |
| s | Second |
| V_s | Striking velocity of the projectile |
| V_r | Residual velocity of the projectile |
| DOP | Depth of penetration |
| J | Joules |
| PSN | Particle simulated nucleation |
| EDAX | Energy dispersive analysis of X-rays |