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#### LIST OF ABBREVIATION

Symbol	Title
A, k, b, n, $\alpha$ , and $\beta$	Site-specific constants
$A_0$	Initial amplitude of seismic wave
А	Amplitude of seismic wave
ANFO	Ammonium nitrate and fuel oil
ANN	Artificial neural network
В	Burden
BIGV	Blast-induced ground vibrations
BPANN	Back-propagation artificial neural network
D	Distance
DGMS	Directorate General of Mines Safety
DIN	German standard
F	Frequency
FIM	Finite element method
HD	Hole depth
HDI	Hole diameter
HSD	High speed diesel
IS	Indian Standard
LRA	Linear regression analysis
MCPR and Q <sub>max</sub>	Maximum charge per delay
MVRA	Multivariate regression analysis
NH	Number of holes
OSMRE	Office of Surface Mining Reclamation and Enforcement
PF	Powder factor
PPV	Peak particle velocity
PVS	Peak vector sum
Q	Quality factor
R	Radial velocity
RMSE	Root mean squared error
SD	Scaled distance
SSE	Summed squared error
S	Spacing
SVM	Support vector machine
Т	Transverse velocity
TB	Total booster
TC	Total charge
TL	Trunk line
TY	Total yield
USBM	United States Bureau of Mines
VOD	Velocity of detonation
V	Vertical velocity