



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET24660, entitled
Impact of Groove Area on Longitudinal Shrinkage in CO₂ Arc Welding Process
by
B N Sathyanarayana Reddy

after review is found suitable and has been published in
Volume 7, Issue VIII, August 2019
in

*International Journal for Research in Applied Science &
Engineering Technology*
(International Peer Reviewed and Refereed Journal)

Good luck for your future endeavors

By [Signature]

Editor in Chief, IJRASET



ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET24660, entitled
Impact of Groove Area on Longitudinal Shrinkage in CO₂ Arc Welding Process
by
Hajare Vilas Shivaram

after review is found suitable and has been published in
Volume 7, Issue VIII, August 2019
in

*International Journal for Research in Applied Science &
Engineering Technology*
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By

Editor in Chief, IJRASET

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET24660, entitled
Impact of Groove Area on Longitudinal Shrinkage in CO2 Arc Welding Process
by
Manjith Madhukar Khade

after review is found suitable and has been published in
Volume 7, Issue VIII, August 2019
in

*International Journal for Research in Applied Science &
Engineering Technology*
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By

Editor in Chief, IJRASET



ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET24660, entitled
Impact of Groove Area on Longitudinal Shrinkage in CO2 Arc Welding Process
by
Utkal S Patil

after review is found suitable and has been published in
Volume 7, Issue VIII, August 2019
in

*International Journal for Research in Applied Science &
Engineering Technology*
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, IJRASET



ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9681-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429