WIRE CAST AND HELIX

NATIONAL STANDARD

NS PREMIUM WELDING WIRE CHARACTERISTICS:

Consistent Cast and Helix Yield Weld Uniformity

Improper wire cast and helix reduces weld quality and adds to direct labor and factory overhead costs. Small cast and large helix causes the wire to exit the welding gun (contact tip) in constantly changing directions. It also causes downtime due to wire feeding problems. Too large a cast will cause downtime on some equipment due to inconsistent current pickup at the contact tip.

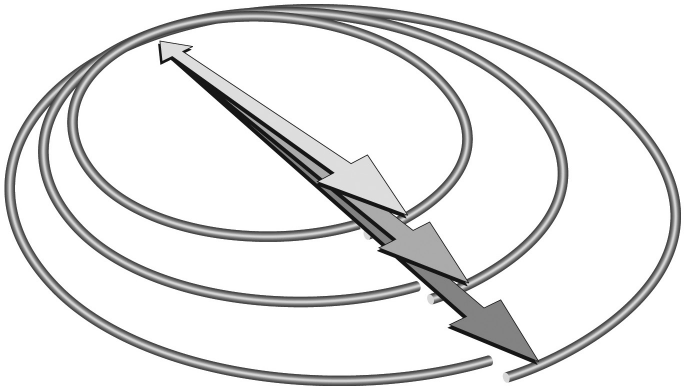
Helix is most detrimental when it is inconsistent and varies throughout the spool. This condition can result in arc wander. The amount of wire deflection due to excessive helix increases as cast decreases or as welding stick-out increases. This will result in weld joint tracking problems.

NS Cast and Helix Characteristics Exceed AWS Standards

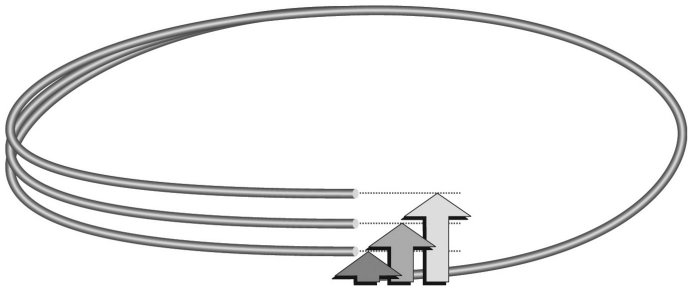
	MINIMUM CAST	MAXIMUM CAST	MAXIMUM HELIX
NS PREMIUM CARBON WELDING WIRE	35"	55"	1"
NS SATIN GLIDE™ STAINLESS STEEL WELDING WIRE	30"	50"	1"
TYPICAL COMPETITIVE WELDING WIRES	Varies	Varies	Varies
AWS SPECIFICATION	15"		1"

- National Standard's controlled cast and helix helps eliminate excessive contact tip and liner wear, reduce arc wander and improve wire feedability.
- Manufactured in the USA according to ISO9001:2008 quality standards

CAST is the diameter of the circle formed by a length of wire thrown loosely on the floor. Cast is normally checked before it enters the wire feed system.



HELIX is the "pitch" of a single strand of weld wire measured as the distance one end of a strand of wire laying on a flat surface rises off that surface. Helix is normally checked before it enters the wire feed system.



National Standard Customer Service | 1-800-777-1618
405-372-7954 (fax)