Main! UNIT-TIMU welding Joining two pieces of nutal, by the application of heat with or without the application of pressure or filler material , permanent joint provol a of plastic welding fusion welding (Pressure welding) (Non-Pressure welding) pices that are to be joined, mated in molted state wated in moltenstate, arrowed to socially & without pressure without -> pressure files. \* with pres. cras eg: forge welding: Revistance welding Are welding fre welding (wen get robre patients) forms small motion. · loder / le root. selectrode gascous -> come > Prox coating Is motten poot. Are length -> crater deposited weld metal. o full working over the electrod erenjourned god service gorg y to After Hose tracking of

· Johning process welding soldering Brazing (pressign) Plassic Fusion (3stidus) · Difference between (2 suide) weatha - carlo o Dejects in welding.

Principal sayety pervices · two conductors (charge carrying) Dweeding shelds 2) Groves -s spark, through found momentarily 3) unipping hammer & Separated brush W Apron. Eloctric Are to is formed 3) Earthing Clamp. -> throughout the · High heat density (5000-6000°c) rength of are. points to bewelded marted in motive destroy · circuit -> 2 polls 1 Creetrode mud by the operator. celethodis) ASN'Y NHOW O Procedion who present of lives tip of the electrode problem similario (at the are) mults work piece mutal simultanionsly melts (directly under the are) carried by are yours small motten, agritated Printers (xes) throughly mixing with filer mutal - fux coating our the electrode. blow totacylors produces i'urt gas atmosphere to prement oxidizing of molten metal.

without -> con voltage of high man
. junition -> con voltage & high current (\$0-50v) (50 A-800A)
10 10 10 10 10 10 10 10 10 10 10 10 10 1
Juntion -> com voltage & high current (40-50 v) (50 A-800A)
Ar airc
marity changes 220/400 V -s 80 to coo V.
Ponery eyell.
. reg. high nottage to 2 " acquire or will coo to'400 A
energy eyell.  veg. high nortage coz it acquive or twice coo to 400 A  pc are -> work piece - 3 -> straight polarity,  electrode high treat is veguived.
pleidrode (2)
high meat is veginives.
and the
Modern de man la venesed when us heat
is nequired.
112. h. 111
electrodis (9 vous)
> used is consumable type and is coexted with juns.
Jo Cosed
scoating is live , terro manganese, cumbose, staret,
has bounded to
ivon poudertaliges several de det soules
· www lawing stage who to to the fall who
-> juix journs stag : wernound by unipping hammar and wire bourn.
builds by the back of the
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-> purpose of wating -> protect mother mital from odding of metal
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Addition of alloying elements.  Addition of alloying elements.  Stag producing elements -> china llay, mica  -> gas shilld producing m -> cellulose, wood, starin, caso 3.  Celebrode end, are, well pool)  -> Desoidining elements -> perror manganese.  -> Alloying elements -> reboro alloys of Mo, Nin -> strength  -> Alloying elements -> reboro alloys of Mo, Nin -> strength  -> Those sounder -> jumpromes are behavior.
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Addition of alloying elements.  Addition of alloying elements.  Slag producing elements -> china lay, mica  -> gas shilld producing u -> cemuse, wood, starin, caso 3.  Celetrode end, arc, well pool)  Deoxidining elements -> perror manganeso.  -> Alloying elements -> reboro alloys of Mo, Nm -> strongth  -> Evon ponder -> improve are behavior.

Gas welding juston method of welding, which a strong gas Janus weld to vaise the temperature of work piece to meet them Congene & Acetylene Soxygen & Hydrogen right proportion of 02 and 40=04 Procedure in · Oxy-acetylene Planne are mixed. · Femp - 3200°C - smitt all commercial formes metals equipment (mont)
-> 2 large steel cylindurs -> orggen -> black 00) JOCEL -S. Maroon, colsolued, at high P) -> vubber tubes, pressure regulatore of voi -> 02 & chest are supplied separately to the blow torch S mised at the norre of blow touch, Oxidizing Planne Neutral Jeanne Carburining glame welling & spunirabite come A Intermediate Isnov worre. s outer bue 4 com envelope · excess oxygen. excess. (1.2:1) ocqual volumes of acetelynl. · lune whatelone exygen and is shorter. · 02: (H) = 0.95:1 i used to weld autyune It has an internet wickel and non 1°1 valle and one gerrous material imm whitesh were pur evenerabe used for exqueetywhene surrounded by a cutting, and not suitably bur your. used for welding for welding, since the most of the welding alloy steels, weld metal will be east Iron and work is done using Al to protect from explicitles

Defects in welding (LUPIC) . Louk of Jurion. - we heat, just transling of the weeding posiosity. - when gaises are trapped in the weld metar , sneuwions - when stag is not removed, before running another weld cracking - when there is thermal stainkage i undercut - excess melting of parent metal vedues strength of the joint. entered the cooles and the presence of a proceed for the presence of a procedural formation of the presence of th . when 2 or more metal items are joined together by meeting, and powing a filler metal (solder) into the joint. MP giller mutal < MP work pieu.
(1500°c-3000°C) · soldering does not involve meeting of work piece. · Znc12 -> jux -> to clean the surface -s to prevent oxidation, soldering iron - apply heat produced from electrical source -> sheet metal work Pb+Sn -> soft solder (150°C - 300°C) -> phymbling -> electrical junctions · cutsnt Ag -> Hard solder. (600°C to 200°C) tools 7. Helping hand 4. Iron stand 1. soldering mon. s. solder 2. Soldering station. 6. sponge 3. inon tips Method 1) Gean the surface

resin or borax.

2) Application of Jus. -s

3) Tinning of surfaces > to remove the to tin that forms on the
pusion in to principation, sufferences of the moining of the moining
(i) Hoaging.
5) Anal van clean up 3 to steel wool - 3 remove the very
primerous. even stag is not vermound, before nevering
Brazing Mount soliding
Bhazing  Brazing process that relies on meeting, from and solidification of abrazing filler metal to journ a leak night seal, of strong structural bond, thetween the material.
produces the coalescence of motorious by a brazing files the basaring temperature in the presence of a brazing files the basaring temperature in the presence of a brazing files
mutal that has a soft of the meeting.  metallurgical bond -> is Jonned by the meeting.
mare Brazing notes.
Make Brazing commes in
It never ox am-
veralles

and a second asset of a notation of a notati

Difference between welding, soldering and To Residence					
Malling					
	) deline				
	Strongest joluts	weakest	Brazing		
strongth	strength of joint is	usually only to	hobetween		
	monethous that of base	make electrical	com bear		
brien this	mutal.	content and not	som extend		
remp.	38 00°C	450°C	600°C		
		Northway	000 6		
	r o luxeraltien	tudan	Me was		
Heating of	work pieces are	it is not required.	heated below		
work hieres	heated till their	required.	The MP.		
,	gener Mengerson				
	Brown where and under one permitted to the				
was the	Melh. prop. of bay	No change	Neguigibu		
change in	metal may change a	t In much	mange in		
new proper	the joint due to dreadi		men prop.		
	and cooling				
	amarah	and remaining	Tee Tee		
Heat treatmen			No heat		
	underivable quality	esof treatment	treatment		
	welding				
premating of	to book to at her at	huntel best of the	is desirable		
work pieu.	piece is veg, as		To make a		
	carried out at my	u temp is req.	strains		
	Cavines	make go	od quality joins		
Mixight Suxterm					

rypes of vision system.
Emage segmentation.