

# DISCOS



**CLAVOS NACIONALES**  
CONQUISTANDO EL FUTURO

## DISCOS PARA CORTE Y DESBASTE

### CORTE DE METAL (ALEMANES)

Código	Diámetro total		Grosor		Barreno	
	pulg	mm	pulg	mm	pulg	mm
146960200	7"	177.8	1/8"	3.1	7/8"	22.2
146960205	9"	228.6	1/8"	3.1	7/8"	22.2

### DESBASTE DE METAL (ALEMANES)

Código	Diámetro total		Grosor		Barreno	
	pulg	mm	pulg	mm	pulg	mm
146960210	4 1/2"	114.3	1/4"	6.3	7/8"	22.2
146960215	7"	177.8	1/4"	6.3	7/8"	22.2
146960220	9"	228.6	1/4"	6.3	7/8"	22.2



USOS: Uso general, alto rendimiento.

**ESPECIFICACIÓN:** A-30S-4BF  
**RESISTENCIA:** Máxima 8,600 r.p.m.

\*Precaución: Usar protectores.

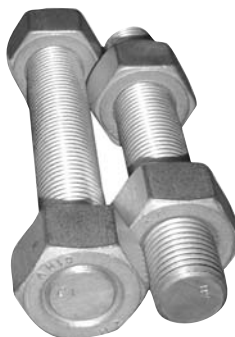
# ESPÁRRAGOS



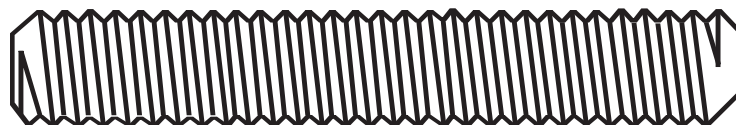
**CLAVOS NACIONALES**  
CONQUISTANDO EL FUTURO

## ESPÁRRAGOS B-7 ASTM-193 NEGROS

- DIÁMETRO:** Desde 1/2" hasta 4"  
**LONGITUDES:** Desde 2" hasta 20"  
**ROSCA:** UNC para diámetros hasta 1" y series 8 UNC desde 1 1/8" hasta 2 1/2" con ajuste 2A  
**NORMAS:** ASTM A-193/A Grado B7  
**MATERIAL:** Acero aleado 4140 medio carbono  
**ACABADOS:**
- Galvanizado electrolítico (ASTM B-633) ó equivalente
  - Galvanizado por inmersión en caliente (ASTM A-153 Clase C)
  - Cadmio (ASTM B-766)
  - Negro
- ESPECIALES:**
- Resina PTFE flouropolímero
  - Cromado
  - Fosfatado
  - Niquelado
  - Cobrizado



• SE CORTAN A REQUERIMIENTO DEL CLIENTE.



### NORMA EQUIVALENTE Y REQUERIMIENTO MECÁNICO

Producto	ASTM grado	Material	Diámetro	Resistencia a la tracción (PSI)	Limite de Fluencia (PSI)	Dureza
Espárrago grado B7	A-193	Acero aleado medio carbono AISI 4140	1/2 - 2 1/2"	125.000	105.000	27-31 Rc.



1/2"	
Código	Medida pulg
127090102	1 1/2"
127090104	1 3/4"
127090106	2"
127090108	2 1/4"
127090110	2 1/2"
127090112	2 3/4"
127090114	3"
127090116	3 1/4"
127090118	3 1/2"
127090120	3 3/4"
127090122	4"
127090124	4 1/4"
127090126	4 1/2"
127090128	4 3/4"
127090130	5"
127090132	5 1/4"
127090134	5 1/2"
127090136	5 3/4"
127090138	6"
127090140	6 1/4"
127090142	6 1/2"
127090144	6 3/4"
127090146	7"
127090148	7 1/4"
127090150	7 1/2"
127090152	7 3/4"
127090154	8"
127090156	8 1/4"
127090158	8 1/2"
127090160	8 3/4"
127090162	9"
127090164	9 1/4"
127090166	9 1/2"
127090168	9 3/4"
127090170	10"
127090172	10 1/4"
127090174	10 1/2"
127090176	10 3/4"
127090178	11"
127090180	11 1/4"
127090182	11 1/2"
127090184	11 3/4"
127090186	12"
127090188	12 1/4"
127090190	12 1/2"
127090192	12 3/4"
127090194	13"
127090196	13 1/4"
127090198	13 1/2"
127090200	13 3/4"
127090202	14"
127090204	14 1/4"
127090206	14 1/2"
127090208	14 3/4"
127090210	15"
127090212	15 1/4"
127090214	15 1/2"
127090216	15 3/4"
127090218	16"

1/2"	
Código	Medida pulg
127090220	16 1/4"
127090222	16 1/2"
127090224	16 3/4"
127090226	17"
127090228	17 1/4"
127090230	17 1/2"
127090232	17 3/4"
127090234	18"
127090236	18 1/4"
127090238	18 1/2"
127090240	18 3/4"
127090242	19"
127090244	19 1/4"
127090246	19 1/2"
127090248	19 3/4"
127090250	20"

5/8"	
Código	Medida pulg
127090302	1 1/2"
127090304	1 3/4"
127090306	2"
127090308	2 1/4"
127090310	2 1/2"
127090312	2 3/4"
127090314	3"
127090316	3 1/4"
127090318	3 1/2"
127090320	3 3/4"
127090322	4"
127090324	4 1/4"
127090326	4 1/2"
127090328	4 3/4"
127090330	5"
127090332	5 1/4"
127090334	5 1/2"
127090336	5 3/4"
127090338	6"
127090340	6 1/4"
127090342	6 1/2"
127090344	6 3/4"
127090346	7"
127090348	7 1/4"
127090350	7 1/2"
127090352	7 3/4"
127090354	8"
127090356	8 1/4"
127090358	8 1/2"
127090360	8 3/4"
127090362	9"
127090364	9 1/4"
127090366	9 1/2"
127090368	9 3/4"
127090370	10"
127090372	10 1/4"
127090374	10 1/2"
127090376	10 3/4"
127090378	11"

5/8"	
Código	Medida pulg
127090380	11 1/4"
127090382	11 1/2"
127090384	11 3/4"
127090386	12"
127090388	12 1/4"
127090390	12 1/2"
127090392	12 3/4"
127090394	13"
127090396	13 1/4"
127090398	13 1/2"
127090400	13 3/4"
127090402	14"
127090404	14 1/4"
127090406	14 1/2"
127090408	14 3/4"
127090410	15"
127090412	15 1/4"
127090414	15 1/2"
127090416	15 3/4"
127090418	16"
127090420	16 1/4"
127090422	16 1/2"
127090424	16 3/4"
127090426	17"
127090428	17 1/4"
127090430	17 1/2"
127090432	17 3/4"
127090434	18"
127090436	18 1/4"
127090438	18 1/2"
127090440	18 3/4"
127090442	19"
127090444	19 1/4"
127090446	19 1/2"
127090448	19 3/4"
127090450	20"
127090470	21 1/4"

3/4"	
Código	Medida pulg
127090502	1 1/2"
127090504	1 3/4"
127090506	2"
127090508	2 1/4"
127090510	2 1/2"
127090512	2 3/4"
127090514	3"
127090516	3 1/4"
127090518	3 1/2"
127090520	3 3/4"
127090522	4"
127090524	4 1/4"
127090526	4 1/2"
127090528	4 3/4"
127090530	5"
127090532	5 1/4"
127090534	5 1/2"

3/4"	
Código	Medida pulg
127090536	5 3/4"
127090537	5 13/16"
127090538	6"
127090540	6 1/4"
127090542	6 1/2"
127090544	6 3/4"
127090546	7"
127090548	7 1/4"
127090550	7 1/2"
127090551	7 11/16"
127090552	7 3/4"
127090554	8"
127090556	8 1/4"
127090558	8 1/2"
127090560	8 3/4"
127090562	9"
127090564	9 1/4"
127090566	9 1/2"
127090568	9 3/4"
127090570	10"
127090572	10 1/4"
127090574	10 1/2"
127090576	10 3/4"
127090578	11"
127090580	11 1/4"
127090582	11 1/2"
127090584	11 3/4"
127090586	12"
127090588	12 1/4"
127090590	12 1/2"
127090592	12 3/4"
127090594	13"
127090596	13 1/4"
127090598	13 1/2"
127090600	13 3/4"
127090602	14"
127090604	14 1/4"
127090606	14 1/2"
127090608	14 3/4"
127090610	15"
127090612	15 1/4"
127090614	15 1/2"
127090616	15 3/4"
127090618	16"
127090620	16 1/4"
127090622	16 1/2"
127090624	16 3/4"
127090626	17"
127090628	17 1/4"
127090629	17 3/8"
127090630	17 1/2"
127090632	17 3/4"
127090634	18"
127090636	18 1/4"
127090638	18 1/2"
127090640	18 3/4"
127090642	19"
127090644	19 1/4"
127090646	19 1/2"



<b>3/4"</b>	
Código	Medida pulg
127090648	19 3/4"
127090650	20"
127090665	21 5/8"
<b>7/8"</b>	
Código	Medida pulg
127090702	1 1/2"
127090704	1 3/4"
127090706	2"
127090708	2 1/4"
127090710	2 1/2"
127090712	2 3/4"
127090714	3"
127090716	3 1/4"
127090718	3 1/2"
127090720	3 3/4"
127090722	4"
127090724	4 1/4"
127090726	4 1/2"
127090728	4 3/4"
127090730	5"
127090732	5 1/4"
127090734	5 1/2"
127090736	5 3/4"
127090738	6"
127090740	6 1/4"
127090742	6 1/2"
127090744	6 3/4"
127090745	6 7/8"
127090746	7"
127090748	7 1/4"
127090750	7 1/2"
127090752	7 3/4"
127090754	8"
127090756	8 1/4"
127090758	8 1/2"
127090760	8 3/4"
127090762	9"
127090764	9 1/4"
127090766	9 1/2"
127090768	9 3/4"
127090770	10"
127090772	10 1/4"
127090774	10 1/2"
127090776	10 3/4"
127090778	11"
127090780	11 1/4"
127090781	11 3/8"
127090782	11 1/2"
127090784	11 3/4"
127090785	11 7/8"
127090786	12"
127090788	12 1/4"
127090790	12 1/2"
127090792	12 3/4"
127090794	13"
127090796	13 1/4"

<b>7/8"</b>	
Código	Medida pulg
127090798	13 1/2"
127090800	13 3/4"
127090802	14"
127090804	14 1/4"
127090806	14 1/2"
127090808	14 3/4"
127090810	15"
127090812	15 1/4"
127090814	15 1/2"
127090816	15 3/4"
127090818	16"
127090820	16 1/4"
127090822	16 1/2"
127090824	16 3/4"
127090826	17"
127090828	17 1/4"
127090830	17 1/2"
127090832	17 3/4"
127090834	18"
127090836	18 1/4"
127090838	18 1/2"
127090840	18 3/4"
127090842	19"
127090844	19 1/4"
127090846	19 1/2"
127090848	19 3/4"
127090850	20"
<b>1"</b>	
Código	Medida pulg
127090902	1 1/2"
127090904	1 3/4"
127090906	2"
127090908	2 1/4"
127090910	2 1/2"
127090912	2 3/4"
127090914	3"
127090916	3 1/4"
127090918	3 1/2"
127090920	3 3/4"
127090922	4"
127090924	4 1/4"
127090926	4 1/2"
127090928	4 3/4"
127090930	5"
127090932	5 1/4"
127090934	5 1/2"
127090936	5 3/4"
127090938	6"
127090940	6 1/4"
127090942	6 1/2"
127090944	6 3/4"
127090945	6 5/8"
127090946	7"
127090948	7 1/4"
127090950	7 1/2"
127090952	7 3/4"

<b>1"</b>	
Código	Medida pulg
127090953	7 7/8"
127090954	8"
127090956	8 1/4"
127090958	8 1/2"
127090960	8 3/4"
127090962	9"
127090964	9 1/4"
127090966	9 1/2"
127090968	9 3/4"
127090970	10"
127090972	10 1/4"
127090974	10 1/2"
127090976	10 3/4"
127090978	11"
127090980	11 1/4"
127090982	11 1/2"
127090984	11 3/4"
127090986	12"
127090988	12 1/4"
127090990	12 1/2"
127090992	12 3/4"
127090994	13"
127090996	13 1/4"
127090998	13 1/2"
127091000	13 3/4"
127091002	14"
127091004	14 1/4"
127091006	14 1/2"
127091008	14 3/4"
127091010	15"
127091012	15 1/4"
127091014	15 1/2"
127091016	15 3/4"
127091018	16"
127091020	16 1/4"
127091022	16 1/2"
127091024	16 3/4"
127091026	17"
127091028	17 1/4"
127091030	17 1/2"
127091032	17 3/4"
127091034	18"
127091036	18 1/4"
127091038	18 1/2"
127091040	18 3/4"
127091042	19"
127091044	19 1/4"
127091046	19 1/2"
127091048	19 3/4"
127091050	20"
127091055	21"
<b>1 1/8"</b>	
Código	Medida pulg
127091102	4"
127091104	4 1/4"
127091106	4 1/2"

<b>1 1/8"</b>	
Código	Medida pulg
127091108	4 3/4"
127091110	5"
127091112	5 1/4"
127091114	5 1/2"
127091116	5 3/4"
127091118	6"
127091120	6 1/4"
127091122	6 1/2"
127091124	6 3/4"
127091126	7"
127091128	7 1/4"
127091130	7 1/2"
127091132	7 3/4"
127091134	8"
127091136	8 1/4"
127091138	8 1/2"
127091140	8 3/4"
127091142	9"
127091144	9 1/4"
127091146	9 1/2"
127091148	9 3/4"
127091150	10"
127091152	10 1/4"
127091154	10 1/2"
127091156	10 3/4"
127091158	11"
127091160	11 1/4"
127091162	11 1/2"
127091164	11 3/4"
127091166	12"
127091168	12 1/4"
127091170	12 1/2"
127091172	12 3/4"
127091174	13"
127091176	13 1/4"
127091178	13 1/2"
127091180	13 3/4"
127091182	14"
127091184	14 1/4"
127091186	14 1/2"
127091188	14 3/4"
127091190	15"
127091192	15 1/4"
127091194	15 1/2"
127091196	15 3/4"
127091198	16"
127091200	16 1/4"
127091202	16 1/2"
127091204	16 3/4"
127091206	17"
127091208	17 1/4"
127091210	17 1/2"
127091212	17 3/4"
127091214	18"
127091216	18 1/4"
127091218	18 1/2"
127091220	18 3/4"
127091222	19"
127091224	19 1/4"



1 1/8"	
Código	Medida pulg
127091226	19 1/2"
127091228	19 3/4"
127091230	20"
127091232	20 1/4"
127091234	20 1/2"
127091236	20 3/4"
127091238	21"
127091240	21 1/4"
127091242	21 1/2"
127091244	21 3/4"
127091246	22"
127091248	22 1/4"
127091250	22 1/2"
127091252	22 3/4"
127091254	23"
127091256	23 1/4"
127091258	23 1/2"
127091260	23 3/4"
127091262	24"
127091264	24 1/4"
127091266	24 1/2"
127091268	24 3/4"
127091270	25"
127091272	25 1/4"
127091274	25 1/2"
127091276	25 3/4"

1 1/4"	
Código	Medida pulg
127091278	4"
127091280	4 1/4"
127091282	4 1/2"
127091284	4 3/4"
127091286	5"
127091288	5 1/4"
127091290	5 1/2"
127091292	5 3/4"
127091294	6"
127091296	6 1/4"
127091298	6 1/2"
127091300	6 3/4"
127091302	7"
127091304	7 1/4"
127091306	7 1/2"
127091308	7 3/4"
127091310	8"
127091312	8 1/4"
127091314	8 1/2"
127091316	8 3/4"
127091318	9"
127091320	9 1/4"
127091322	9 1/2"
127091324	9 3/4"
127091326	10"
127091328	10 1/4"
127091330	10 1/2"
127091332	10 3/4"
127091334	11"

1 1/4"	
Código	Medida pulg
127091336	11 1/4"
127091338	11 1/2"
127091340	11 3/4"
127091342	12"
127091344	12 1/4"
127091346	12 1/2"
127091348	12 3/4"
127091350	13"
127091352	13 1/4"
127091354	13 1/2"
127091356	13 3/4"
127091358	14"
127091360	14 1/4"
127091362	14 1/2"
127091364	14 3/4"
127091366	15"
127091368	15 1/4"
127091370	15 1/2"
127091372	15 3/4"
127091374	16"
127091376	16 1/4"
127091378	16 1/2"
127091380	16 3/4"
127091382	17"
127091384	17 1/4"
127091386	17 1/2"
127091388	17 3/4"
127091390	18"
127091392	18 1/4"
127091394	18 1/2"
127091396	18 3/4"
127091398	19"
127091400	19 1/4"
127091402	19 1/2"
127091404	19 3/4"
127091406	20"
127091408	20 1/4"
127091410	20 1/2"
127091412	20 3/4"
127091414	21"
127091416	21 1/4"
127091418	21 1/2"
127091420	21 3/4"
127091422	22"
127091424	22 1/4"
127091426	22 1/2"
127091428	22 3/4"
127091430	23"
127091432	23 1/4"
127091434	23 1/2"
127091436	23 3/4"
127091438	24"
127091440	24 1/4"
127091442	24 1/2"
127091444	24 3/4"
127091446	25"

1 3/8"	
Código	Medida pulg
127091448	4"
127091450	4 1/4"
127091452	4 1/2"
127091454	4 3/4"
127091456	5"
127091458	5 1/4"
127091460	5 1/2"
127091462	5 3/4"
127091463	6"
127091464	6 1/4"
127091466	6 1/2"
127091468	6 3/4"
127091470	7"
127091472	7 1/4"
127091474	7 1/2"
127091476	7 3/4"
127091478	8"
127091480	8 1/4"
127091482	8 1/2"
127091484	8 3/4"
127091486	9"
127091488	9 1/4"
127091490	9 1/2"
127091492	9 3/4"
127091494	10"
127091496	10 1/4"
127091498	10 1/2"
127091500	10 3/4"
127091502	11"
127091504	11 1/4"
127091506	11 1/2"
127091508	11 3/4"
127091510	12"
127091512	12 1/4"
127091514	12 1/2"
127091516	12 3/4"
127091518	13"
127091520	13 1/4"
127091522	13 1/2"
127091524	13 3/4"
127091526	14"
127091528	14 1/4"
127091530	14 1/2"
127091532	14 3/4"
127091534	15"
127091536	15 1/4"
127091538	15 1/2"
127091540	15 3/4"
127091542	16"
127091544	16 1/4"
127091546	16 1/2"
127091548	16 3/4"
127091550	17"
127091552	17 1/4"
127091554	17 1/2"
127091556	17 3/4"
127091558	18"
127091560	18 1/4"
127091562	18 1/2"

1 3/8"	
Código	Medida pulg
127091564	18 3/4"
127091566	19"
127091568	19 1/4"
127091570	19 1/2"
127091572	19 3/4"
127091574	20"
127091576	20 1/4"
127091578	20 1/2"
127091580	20 3/4"
127091582	21"
127091584	21 1/4"
127091586	21 1/2"
127091588	21 3/4"
127091590	22"
127091592	22 1/4"
127091594	22 1/2"
127091596	22 3/4"
127091598	23"
127091600	23 1/4"
127091602	23 1/2"
127091604	22 3/4"
127091606	24"
127091608	24 1/4"
127091610	24 1/2"
127091612	24 3/4"
127091614	25"

1 1/2"	
Código	Medida pulg
127091616	4"
127091618	4 1/4"
127091620	4 1/2"
127091622	4 3/4"
127091624	5"
127091626	5 1/4"
127091628	5 1/2"
127091630	5 3/4"
127091632	6"
127091634	6 1/2"
127091636	6 3/4"
127091638	7"
127091640	7 1/4"
127091642	7 1/2"
127091644	7 3/4"
127091646	8"
127091648	8 1/4"
127091650	8 1/2"
127091652	8 3/4"
127091654	9"
127091656	9 1/4"
127091658	9 1/2"
127091659	9 3/8"
127091660	9 3/4"
127091662	10"
127091664	10 1/4"
127091666	10 1/2"
127091668	10 3/4"
127091670	11"



1 1/2"	
Código	Medida pulg
127091672	11 1/4"
127091674	11 1/2"
127091676	11 3/4"
127091678	12"
127091680	12 1/4"
127091682	12 1/2"
127091684	12 3/4"
127091686	13"
127091688	13 1/4"
127091690	13 1/2"
127091692	13 3/4"
127091694	14"
127091696	14 1/4"
127091698	14 1/2"
127091700	14 3/4"
127091702	15"
127091704	15 1/4"
127091706	15 1/2"
127091708	15 3/4"
127091710	16"
127091712	16 1/4"
127091714	16 1/2"
127091716	16 3/4"
127091718	17"
127091720	17 1/4"
127091722	17 1/2"
127091724	17 3/4"
127091726	18"
127091728	18 1/4"
127091730	18 1/2"
127091732	18 3/4"
127091734	19"
127091736	19 1/4"
127091738	19 1/2"
127091740	19 3/4"
127091742	20"
127091744	20 1/4"
127091746	20 1/2"
127091748	20 3/4"
127091750	21"
127091752	21 1/4"
127091754	21 1/2"
127091756	21 3/4"
127091758	22"
127091760	22 1/4"
127091762	22 1/2"
127091764	22 3/4"
127091766	23"
127091768	23 1/4"
127091770	23 1/2"
127091772	23 3/4"
127091774	24"
127091776	24 1/4"
127091778	24 1/2"
127091780	24 3/4"
127091782	25"
127091783	33"

1 5/8"	
Código	Medida pulg
127091784	4"
127091786	4 1/4"
127091788	4 1/2"
127091790	4 3/4"
127091792	5"
127091794	5 1/4"
127091796	5 1/2"
127091797	5 3/4"
127091800	6"
127091802	6 1/4"
127091804	6 1/2"
127091806	6 3/4"
127091808	7"
127091810	7 1/4"
127091812	7 1/2"
127091814	7 3/4"
127091816	8"
127091818	8 1/4"
127091820	8 1/2"
127091822	8 3/4"
127091824	9"
127091826	9 1/4"
127091828	9 1/2"
127091830	9 3/4"
127091832	10"
127091834	10 1/4"
127091836	10 1/2"
127091838	10 3/4"
127091840	11"
127091842	11 1/4"
127091844	11 1/2"
127091846	11 3/4"
127091848	12"
127091850	12 1/4"
127091852	12 1/2"
127091854	12 3/4"
127091856	13"
127091858	13 1/4"
127091860	13 1/2"
127091862	13 3/4"
127091864	14"
127091866	14 1/4"
127091868	14 1/2"
127091870	14 3/4"
127091872	15"
127091874	15 1/4"
127091876	15 1/2"
127091878	15 3/4"
127091880	16"
127091882	16 1/4"
127091884	16 1/2"
127091886	16 3/4"
127091888	17"
127091890	17 1/4"
127091892	17 1/2"
127091894	17 3/4"
127091896	18"
127091898	18 1/4"
127091900	18 1/2"

1 5/8"	
Código	Medida pulg
127091902	18 3/4"
127091904	19"
127091906	19 1/4"
127091908	19 1/2"
127091910	19 3/4"
127091912	20"
127091914	20 1/4"
127091916	20 1/2"
127091918	20 3/4"
127091920	21"
127091922	21 1/4"
127091924	21 1/2"
127091926	21 3/4"
127091928	22"
127091930	22 1/4"
127091932	22 1/2"
127091934	22 3/4"
127091936	23"
127091938	23 1/4"
127091940	23 1/2"
127091942	23 3/4"
127091944	24"
127091946	24 1/4"
127091948	24 1/2"
127091950	24 3/4"
127091952	25"
127091953	26"

1 3/4"	
Código	Medida pulg
127091954	5"
127091956	5 1/4"
127091958	5 1/2"
127091960	5 3/4"
127091961	6"
127091962	6 1/4"
127091964	6 1/2"
127091966	6 3/4"
127091968	7"
127091969	7 1/4"
127091972	7 1/2"
127091974	7 3/4"
127091976	8"
127091978	8 1/4"
127091980	8 1/2"
127091982	8 3/4"
127091984	9"
127091986	9 1/4"
127091988	9 1/2"
127091990	9 3/4"
127091992	10"
127091994	10 1/4"
127091996	10 1/2"
127091998	10 3/4"
127092000	11"
127092002	11 1/4"
127092004	11 1/2"

1 3/4"	
Código	Medida pulg
127092006	11 3/4"
127092008	12"
127092010	12 1/4"
127092012	12 1/2"
127092014	12 3/4"
127092016	13"
127092018	13 1/4"
127092020	13 1/2"
127092022	13 3/4"
127092024	14"
127092026	14 1/4"
127092028	14 1/2"
127092030	14 3/4"
127092032	15"
127092034	15 1/4"
127092036	15 1/2"
127092038	15 3/4"
127092040	16"
127092042	16 1/4"
127092044	16 1/2"
127092046	16 3/4"
127092048	17"
127092050	17 1/4"
127092052	17 1/2"
127092054	17 3/4"
127092056	18"
127092058	18 1/4"
127092060	18 1/2"
127092062	18 3/4"
127092064	19"
127092066	19 1/4"
127092068	19 1/2"
127092070	19 3/4"
127092072	20"
127092074	20 1/4"
127092076	20 1/2"
127092078	20 3/4"
127092080	21"
127092082	21 1/4"
127092084	21 1/2"
127092086	21 3/4"
127092088	22"
127092090	22 1/4"
127092092	22 1/2"
127092094	22 3/4"
127092096	23"
127092098	23 1/4"
127092100	23 1/2"
127092102	23 3/4"
127092104	24"
127092106	24 1/4"
127092108	24 1/2"
127092110	24 3/4"
127092112	25"



1 7/8"	
Código	Medida pulg
127092114	5"
127092116	5 1/4"
127092118	5 1/2"
127092120	5 3/4"
127092121	6"
127092122	6 1/4"
127092124	6 1/2"
127092126	6 3/4"
127092128	7"
127092130	7 1/4"
127092132	7 1/2"
127092134	7 3/4"
127092136	8"
127092138	8 1/4"
127092140	8 1/2"
127092142	8 3/4"
127092144	9"
127092146	9 1/4"
127092148	9 1/2"
127092150	9 3/4"
127092152	10"
127092154	10 1/4"
127092156	10 1/2"
127092158	10 3/4"
127092160	11"
127092162	11 1/4"
127092164	11 1/2"
127092166	11 3/4"
127092168	12"
127092170	12 1/4"
127092171	12 1/2"
127092172	12 3/4"
127092176	13"
127092178	13 1/4"
127092180	13 1/2"
127092182	13 3/4"
127092184	14"
127092186	14 1/4"
127092188	14 1/2"
127092190	14 3/4"
127092192	15"
127092194	15 1/4"
127092196	15 1/2"
127092198	15 3/4"
127092200	16"
127092202	16 1/4"
127092204	16 1/2"
127092206	16 3/4"
127092208	17"
127092210	17 1/4"
127092212	17 1/2"
127092214	17 3/4"
127092216	18"
127092218	18 1/4"
127092220	18 1/2"
127092222	18 3/4"
127092224	19"
127092226	19 1/4"
127092228	19 1/2"

1 7/8"	
Código	Medida pulg
127092230	19 3/4"
127092232	20"
127092234	20 1/4"
127092236	20 1/2"
127092238	20 3/4"
127092240	21"
127092242	21 1/4"
127092244	21 1/2"
127092246	21 3/4"
127092248	22"
127092250	22 1/4"
127092252	22 1/2"
127092254	22 3/4"
127092256	23"
127092258	23 1/4"
127092260	23 1/2"
127092262	23 3/4"
127092264	24"
127092266	24 1/4"
127092268	24 1/2"
127092270	24 3/4"
127092272	25"

2"	
Código	Medida pulg
127092274	5"
127092276	5 1/4"
127092278	5 1/2"
127092280	5 3/4"
127092282	6"
127092284	6 1/4"
127092286	6 1/2"
127092288	6 3/4"
127092290	7"
127092292	7 1/4"
127092294	7 1/2"
127092296	7 3/4"
127092298	8"
127092300	8 1/4"
127092302	8 1/2"
127092304	8 3/4"
127092306	9"
127092308	9 1/4"
127092310	9 1/2"
127092312	9 3/4"
127092314	10"
127092316	10 1/4"
127092318	10 1/2"
127092320	10 3/4"
127092322	11"
127092324	11 1/4"
127092326	11 1/2"
127092328	11 3/4"
127092330	12"
127092332	12 1/4"
127092334	12 1/2"
127092336	12 3/4"

2"	
Código	Medida pulg
127092338	13"
127092340	13 1/4"
127092342	13 1/2"
127092344	13 3/4"
127092346	14"
127092348	14 1/4"
127092350	14 1/2"
127092352	14 3/4"
127092354	15"
127092356	15 1/4"
127092358	15 1/2"
127092360	15 3/4"
127092362	16"
127092364	16 1/4"
127092366	16 1/2"
127092368	16 3/4"
127092370	17"
127092372	17 1/4"
127092374	17 1/2"
127092376	17 3/4"
127092378	18"
127092380	18 1/4"
127092382	18 1/2"
127092384	18 3/4"
127092386	19"
127092388	19 1/4"
127092390	19 1/2"
127092392	19 3/4"
127092394	20"
127092396	20 1/4"
127092398	20 1/2"
127092400	20 3/4"
127092402	21"
127092404	21 1/4"
127092406	21 1/2"
127092408	21 3/4"
127092410	22"
127092412	22 1/4"
127092414	22 1/2"
127092416	22 3/4"
127092418	23"
127092420	23 1/4"
127092422	23 1/2"
127092424	23 3/4"
127092426	24"
127092428	24 1/4"
127092430	24 1/2"
127092432	24 3/4"
127092434	25"

2 1/4"	
Código	Medida pulg
127092436	6"
127092438	6 1/4"
127092440	6 1/2"
127092442	6 3/4"
127092444	7"
127092446	7 1/4"

2 1/4"	
Código	Medida pulg
127092448	7 1/2"
127092450	7 3/4"
127092452	8"
127092454	8 1/4"
127092456	8 1/2"
127092458	8 3/4"
127092460	9"
127092462	9 1/4"
127092464	9 1/2"
127092466	9 3/4"
127092468	10"
127092470	10 1/4"
127092472	10 1/2"
127092474	10 3/4"
127092476	11"
127092478	11 1/4"
127092480	11 1/2"
127092482	11 3/4"
127092484	12"
127092486	12 1/4"
127092488	12 1/2"
127092490	12 3/4"
127092492	13"
127092494	13 1/4"
127092496	13 1/2"
127092498	13 3/4"
127092500	14"
127092502	14 1/4"
127092504	14 1/2"
127092506	14 3/4"
127092508	15"
127092510	15 1/4"
127092512	15 1/2"
127092514	15 3/4"
127092516	16"
127092518	16 1/4"
127092520	16 1/2"
127092522	16 3/4"
127092524	17"
127092526	17 1/4"
127092528	17 1/2"
127092530	17 3/4"
127092532	18"
127092534	18 1/4"
127092536	18 1/2"
127092538	18 3/4"
127092540	19"
127092542	19 1/4"
127092544	19 1/2"
127092546	19 3/4"
127092548	20"
127092550	20 1/4"
127092552	20 1/2"
127092554	20 3/4"
127092556	21"
127092558	21 1/4"
127092560	21 1/2"
127092562	21 3/4"
127092564	22"



**CLAVOS NACIONALES**  
CONQUISTANDO EL FUTURO

## ESPÁRRAGOS B-7 ASTM-193 NEGROS

2 1/4"	
Código	Medida pulg
127092566	22 1/4"
127092568	22 1/2"
127092570	22 3/4"
127092572	23"
127092574	23 1/4"
127092576	23 1/2"
127092578	23 3/4"
127092580	24"
127092582	24 1/4"
127092584	24 1/2"
127092586	24 3/4"
127092588	25"
127092589	32'

2 1/2"	
Código	Medida pulg
127092590	6"
127092592	6 1/4"
127092594	6 1/2"
127092596	6 3/4"
127092598	7"
127092600	7 1/4"
127092602	7 1/2"
127092604	7 3/4"
127092606	8"

2 1/2"	
Código	Medida pulg
127092608	8 1/4"
127092610	8 1/2"
127092612	8 3/4"
127092614	9"
127092616	9 1/4"
127092618	9 1/2"
127092620	9 3/4"
127092622	10"
127092624	10 1/4"
127092626	10 1/2"
127092628	10 3/4"
127092630	11"
127092632	11 1/4"
127092634	11 1/2"
127092636	11 3/4"
127092638	12"
127092640	12 1/4"
127092642	12 1/2"
127092644	12 3/4"
127092646	13"
127092648	13 1/4"
127092650	13 1/2"
127092652	13 3/4"
127092654	14"
127092656	14 1/4"
127092658	14 1/2"
127092660	14 3/4"

2 1/2"	
Código	Medida pulg
127092662	15"
127092664	15 1/4"
127092666	15 1/2"
127092668	15 3/4"
127092670	16"
127092672	16 1/4"
127092674	16 1/2"
127092676	16 3/4"
127092678	17"
127092680	17 1/4"
127092682	17 1/2"
127092684	17 3/4"
127092686	18"
127092688	18 1/4"
127092690	18 1/2"
127092692	18 3/4"
127092694	19"
127092696	19 1/4"
127092698	19 1/2"
127092700	19 3/4"
127092702	20"
127092704	20 1/4"
127092706	20 1/2"
127092708	20 3/4"
127092710	21"
127092712	21 1/4"
127092714	21 1/2"

2 1/2"	
Código	Medida pulg
127092716	21 3/4"
127092718	22"
127092720	22 1/4"
127092722	22 1/2"
127092724	22 3/4"
127092726	23"
127092728	23 1/4"
127092730	23 1/2"
127092732	23 3/4"
127092734	24"
127092736	24 1/4"
127092738	24 1/2"
127092740	24 3/4"
127092742	25"
127092878	42"

2 3/4"	
Código	Medida pulg
127092950	21"

## EXTRACTORES PARA TORNILLOS



**CLAVOS NACIONALES**  
CONQUISTANDO EL FUTURO

## EXTRACTORES PARA TORNILLOS



### JUEGO DE EXTRACTORES

Código	Piezas	Modelo
146960400	5	ext-5

Diseñados para remover pernos, tornillos de cabeza hueca y accesorios rotos. Agresivo diseño para ofrecer mayor poder de agarre.

Tipo de extractor	Para tornillo	Diámetro pulg	Longitud mm	Usar broca pulg
no. 1	1/8-1/4	1/16"-9/64"	50	5/64"
no. 2	1/4-5/16	5/64"-3/16"	57	7/64"
no. 3	5/16-7/16	1/8"-1/4"	64	5/32"
no. 4	7/16-9/16	3/16"-11/32"	71	7/32"
no. 5	9/16-3/4	1/4"-7/16"	79	9/32"